CONTENTS OF SUPPLEMENT.

PERSONAL 81
Obituary 81
ENGINEERING SOCIETIES 81
Coming Technical Meetings 81
NEW PUBLICATIONS 81
Trade Publications 82
CONSTRUCTION NEWS:
Condensed List of Contracts Pending 82
Railways 82
Street and Electric Railways 83
Electric Light and Power 83
Bridges 84
Buildings 84
Water-works 85
Sewerage 86
Garbage Disposal and Street Cleaning 86
Streets and Roads 86
Manufacturing Plants 87
Contract Prices 87
Miscellaneous Contracts 87
INDUSTRIAL NOTES. 88

PERSONAL.

Mr. Charles Blucher, civil engineer, of Butte City, Mont., was married Sept. 6 to Miss Nellie Ward, of Bethlehem, Pa.

Mr. J. L. Sterritt has been appointed Superintendent of Streets of Sing Sing, N. Y., to succeed Mr. Edgar F. Wheeler.

Mr. G. M. Briggs, civil engineer and surveyor, has opened an office in the Farmers' and Manufacturers' Bank Building, Poughkeepsie, N. Y.

Mr. W. M. Leftwich, Jr., has been appointed City Engineer of Nashville, Tenn., to succeed Mr. W. W. Southgate. Mr. Felix Smith has been appointed Assistant City Engineer.

Capt. Charles Meyer, City Engineer, of Hoboken, N. J., is dangerously ill with typhoid fever, contracted at Camp Thomas, Chickamauga Park, Ga. He is an officer in the 9th Regt., U. S. Volunteers.

Gen. Peter C. Hains, M. Am. Soc. C. E., Corps of Engineers, U. S. Army, of Baltimore, Md., has returned from Porto Rico and will at once resume his duties as a member of the Nicaragua Canal Commission.

Mr. W. M. Scanlon, who was formerly with the Lee Construction Co., New York city, builders of fireproof floors, is now Superintendent for the firm of Thompson & Adams, builders, Townsend Building, New York city.

Mr. James T. Taylor, M. Am. Soc. C. E., has resigned his position as Chief Engineer of the Pecos Irrigation & Improvement Co., Eddy, N. Mex., and has accepted the position of Chief Engineer of the Honolulu Sugar Co., with offices at Honolulu, H. I.

Mr. William R. Hill, M. Am. Soc. C. E., Chief Engineer and Superintendent of the Water Department, of Syracuse, N. Y., has been appointed as one of the appraisers of the plant of the Fulton Water-Works Co., Fulton, N. Y., which the latter city proposes to purchase.

Mr. J. R. C. Wrenshall, Supervisor of Road, of the Baltimore & Ohio R. R., with headquarters at Baltimore, Md., has been appointed Acting Division Engineer of Maintenance of Way, in charge of the Third Division, with headquarters at Cumberland, Md., to succeed Mr. George L. Hall, resigned.

Col. Samuel M. Mansfield, Corps of Engineers, U. S. Army, on duty at Boston, Mass., has been ordered to San Francisco, Cal., to relieve Col. Chas. R. Suter, M. Am. Soc. C. E., Corps of Engineers, of his duties as a member of the California Debris Commission to regulate hydraulic mining in that state, and also as Division Engineer of the Pacific Division.

Mr. Morgan Brooks, M. Am. Inst. E. E., President and Manager of the Electrical Engineering Co., Minneapolis, Minn., has been appointed Professor of Electrical Engineering in the University of Nebraska, Lincoln, Neb., to succeed Prof. Robert Bowie Owens, M. Am. Inst. E. E., resigned. Prof. Brooks is a graduate of Brown University, Providence, R. I., in the class of 1881, and of the Stevens Institute of Technology, Hoboken, N. J., in the class of 1883. He has delivered lectures to the engineering students of the University of Minnesota. He will also retain his former position.

OBITUARY.

Mr. Henry Hartwick, building contractor, of Green Ridge, Pa., died Sept. 3, aged 68.

Capt. J. H. Gunning, road builder and contractor, of Vicksburg, Tenn., died Sept. 5.

Mr. John Lovett Keeling, contractor and builder, of Baltimore, Md., died Sept. 6, aged 68.

Mr. Hamilton B. Gaylord, builder, of Philadelphia, Pa., died Sept. 11, aged 82. He was at one time Supervisor of Highways of that city.

Mr. Thomas I. George, civil engineer, died at Towson, Md., Sept. 4, aged 56. He was formerly connected with the United States Geodetic Survey.

Mr. James Wilson, contractor, of Allegheny, Pa., was killed Sept. 2 by falling from the tower of Carnegie Library in that city. He was 60 years of age.

Mr. Walter S. Alexander, of St. Paul, Minn., died Sept. 5. He was the first President of the Eastern Ry. of Minnesota, and from Dec. 1, 1890, until the latter part of 1893 he was also the General Manager of that road. Since December, 1895, he had been connected with the Union Pacific as Assistant to the Master-in-Chancery, in charge of the receivership cases.

Mr. Daniel H. Johnson, for several years Superintendent of the water-works of Salem, Mass., died at Stamford, Conn., Sept. 7, aged 63. He was also a member of the water board for a number of years.

Mr. James P. Hyde, inventor of sanitary and plumbing devices, died at his home in New York city Sept. 9, aged 63. He is said to have been the inventor of the first wooden hydrant in use in that city.

Judge Thomas M. Cooley, who was for four years Chairman of the first Interstate Commerce Commission, died at his home, Ann Arbor, Mich., Sept. 12. He was born in Attica, N. Y., Jan. 6, 1824, and began the study of law in Palmyra, N. Y., in 1842, removing to Michigan in 1843, where he was admitted to the bar in 1846. He followed his profession there and also edited a newspaper. In 1857 he was assigned the task by the State Senate of compiling the general statutes of that state. In 1858 he was appointed Reporter for the Supreme Court of the state, and held that office seven years, during which time he published eight volumes of reports and a digest of all the state decisions. In 1859 he was appointed a professor in the law department of the University of Michigan, which was organized in that year, and was afterwards Dean of the Faculty for many years. In 1864 he was elected to fill a vacancy in the state Supreme Court, and in 1868 and 1869 was Chief Justice. In 1871 he was made Professor of Constitutional and Administrative Law in the School of Political Science of the above-named university, and was Dean of this latter school, as well as Professor of American History in the university. In 1887 he was appointed Receiver of the Wabash R. R., but soon resigned the position to accept the appointment by President Cleveland as Chairman of the first Interstate Commerce Commission. He held the position until 1891, when ill health, resulting from overwork, compelled his resignation. Judge Cooley was an able and voluminous writer on legal subjects, and one of the highest authorities on constitutional law.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

NORTHWESTERN TRACK AND BRIDGE ASSOCIATION.
Sept. 16. D. W. Meeker, St. Paul, Minn.

ENGINEERS' CLUB OF PHILADELPHIA.
Sept. 17. Discussion "On Proper Proportions of Parts of Steam Engines." Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

ENGINEERS' CLUB OF COLUMBUS.
Sept. 17. Secy., H. M. Gates, 12½ North High St., Columbus, O.

TECHNICAL CLUB OF OMAHA.
Sept. 19. Secy., J. Harry Lawrie, Omaha, Neb.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
Sept. 19. Secy., Marshall Morris, 18 Norton Bldg., Louisville, Ky.

ENGINEERS' CLUB OF MINNEAPOLIS.
Sept. 19. Secy., H. E. Smith, 1020 S. E. 4th St., Minneapolis, Minn.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
Sept. 20. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.

BOSTON SOCIETY OF CIVIL ENGINEERS.
Sept. 21. Secy., S. E. Tinkham, City Hall, Boston, Mass.

WESTERN FOUNDRYMEN'S ASSOCIATION.
Sept. 21. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.

ENGINEERS' CLUB OF ST. LOUIS.
Sept. 21. Secy., Richard McCulloch, 2401 N. Spring Ave., St. Louis, Mo.

WESTERN SOCIETY OF ENGINEERS.
Sept. 21. "The Soudan and Recent British Campaigns There," Col. H. G. Prout. Secy., N. L. Litten, Monadnock Block, Chicago, Ill.

ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
Sept. 21. Secy., Frank H. Olmsted, Los Angeles, Cal.

ENGINEERING ASSOCIATION OF THE SOUTH.
Sept. 22. Secy., C. B. Wilson, 1000 Broad St., Nashville, Tenn.

CIVIL ENGINEERS' CLUB OF CLEVELAND.
Sept. 27. Secy., Wm. H. Searles, Case Library Bldg., Cleveland, O.

CENTRAL STATES WATER-WORKS ASSOCIATION.
Sept. 27-29. Annual meeting, Springfield, O. Secy., John Fisher, 11 Riley St., Hamilton, O.

AMERICAN PUBLIC HEALTH ASSOCIATION.
Sept. 27-30. Annual meeting, Ottawa, Canada. Secy., Dr. C. O. Probst, Columbus, O.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
Sept. 28. Secy., C. W. Hunt, 220 W. 57th St., New York city.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
Sept. 28. Secy., R. W. Pope, 26 Cortland St., New York city.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
Oct. 3. Secy., C. L. Annan, City Engineers' Office, St. Paul, Minn.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Oct. 3. Secy., H. J. March, Library Bldg., Buffalo, N. Y.

BROOKLYN ENGINEERS' CLUB.
Oct. 6. Secy., A. J. Prevost, Jr., 191 Montague St., Brooklyn, N. Y.

CHICAGO ELECTRICAL ASSOCIATION.
Oct. 7. Secy., J. R. Cravath, 825 Monadnock Block, Chicago, Ill.

TECHNICAL SOCIETY OF THE PACIFIC COAST.
Oct. 7. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.

MONTANA SOCIETY OF ENGINEERS.
Oct. 8. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.

ENGINEERS' CLUB OF KANSAS CITY.
Oct. 10. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.

THE LOUISIANA ENGINEERING SOCIETY.
Oct. 10. Secy., J. F. Coleman, 712 Union St., New Orleans, La.

NEW ENGLAND RAILROAD CLUB.
Oct. 11. Secy., Edw. L. Janes, P. O. Box 1158, Boston, Mass.

DENVER SOCIETY OF CIVIL ENGINEERS.
Oct. 11. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.

NORTHWEST RAILWAY CLUB.
Oct. 11. Secy., T. A. Foque, Soo Line, Minneapolis, Minn.

CANADIAN SOCIETY OF CIVIL ENGINEERS.
Oct. 13. Secy., C. A. McNab, 112 Mansfield St., Montreal, Canada.

ST. LOUIS RAILWAY CLUB.
Oct. 14. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.

AMERICAN INSTITUTE OF MINING ENGINEERS.
Oct. 18. Annual meeting, Buffalo, N. Y. Secy., R. W. Raymond, P. O. Box 225, New York city.

AMERICAN ASSOCIATION OF RAILWAY SUPERINTENDENTS OF BRIDGES AND BUILDINGS.
Oct. 18-20. Annual meeting, Richmond, Va. Secy., S. F. Patterson, Boston & Maine R. R., Concord, N. H.

PENNSYLVANIA STREET RAILWAY ASSOCIATION.
Oct. 19-20. Annual meeting, Scranton, Pa. Secy., S. P. Light, Lebanon, Pa.

AMERICAN GAS LIGHT ASSOCIATION.
Oct. 19-21. Annual meeting, Niagara Falls, N. Y. Secy., Alfred E. Forstall, Montclair, N. J.

ENGINEERS' CLUB OF CINCINNATI.
Oct. 20. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.

NEW YORK RAILROAD CLUB.
Oct. 20. Secy., W. W. Wheatley, 108 Montague St., Brooklyn, N. Y.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
Oct. 20. Secy., F. A. Charpiot, P. O. Box 13, Savannah, Ga.

AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENT.
Oct. 26-28. Annual meeting, Washington, D. C. Secy., D. L. Fulton, Bureau of Highways and Sewers, Allegheny, Pa.

AMERICAN GAS LIGHT ASSOCIATION.—The annual meeting of this association will be held Oct. 19-21 at Niagara Falls. The following papers will be presented: "The Effect of the Depth of Fire Upon the Practical Efficiency of a Water-Gas Generator," Mr. J. M. Rusby, Jersey City, N. J.; "Notes on Mains and Main Laying," Walton Forstall, Philadelphia, Pa.; "The Loss of Illuminating Power of 25 to 30 Candle Gas when Mixed with Air," Dr. E. G. Love, New York, N. Y.; "A Comparison Between the Cost of Pumping Gas by Steam and Gas Engines," Mr. H. L. Rice, Norfolk, Va. Papers will also be read by Mr. E. C. Jones, San Francisco, Cal., and Mr. Irvin Butterworth, Columbus, Ohio.

NATIONAL IRRIGATION CONGRESS.—The seventh annual meeting was held at Cheyenne, Wyo., commencing on Sept. 1, Hon. Joseph M. Carey presiding. After the transaction of routine business a number of interesting papers were read. Mr. E. S. Nettleton, of Colorado, spoke of the success and failures in canal building and the causes thereof; he mentioned that in 1892 Colorado had 1,500,000 acres irrigated, which yielded crops valued at $22,000,000. The value of the 6,800,000 acres now under irrigation in that state had risen from $17,000,000 to $87,000,000. Mr. F. H. Newall, of the U. S. Coast and Geodetic Survey, presented a paper on the measurement of streams with relation to irrigation; Senator F. E. Warren told of the work being done in Congress for irrigation, and thought that the progress being made was satisfactory under the present appropriation of $50,000 per year; Mr. J. S. Emery, of Kansas, discussed the storage of water, and Mr. Elwood Mead, State Engineer of Wyoming, read a paper upon the obstacles to settlement in the arid regions. Mr. Mead said that there were still about 500,000,000 acres of public land in the West which brought no return in rentals or taxes to either the state or the nation. The greater part of this is arid pasture land and he believed that fully 300,000,000 acres of this land could be leased to stockmen without interfering with irrigable land. A rental of 1 ct. per acre would bring in $3,000,000 annually, which sum could be expended upon reservoirs and canals for permanent development.

AMERICAN PUBLIC HEALTH ASSOCIATION.—The 26th annual meeting of this association will be held at Ottawa, Canada, Sept. 27-30. Secretary C. O. Probst has issued a circular calling attention to the meeting and giving instructions regarding hotel and railway arrangements and including other information. The list of subjects for consideration, to be reported upon by committees, is as follows: "Pollution of Water-Supplies;" "Disposal of Garbage and Refuse;" "Animal Diseases and Animal Food;" "Demography and Statistics in Their Sanitary Relation;" "Car Sanitation;" "Steamship and Steamboat Sanitation;" "The Etiology of Yellow Fever;" "The Relation of Forestry to Public Health;" "The Cause and Prevention of Infectious Diseases;" "Public Health Legislation;" "The Cause and Prevention of Infant Mortality;" "Thansportation of Diseased Tissues by Mail;" "The Period During Which Each Contagious Disease is Transmissible and the Length of Time for Which Each Patient is Dangerous to the Community;" "Sanitation, with Special Reference to Drainage, Plumbing and Ventilation of Public and Private Buildings;" "International Arrangement for Protection Against the Transmission of Infectious Diseases;" "Disinfectants;" "To Examine Into the Existing Sanitary Municipal Organizations of the Countries Belonging to the Association, with a View to Report Upon Those Most Successful in Practical Results;" "The Duties and Responsibilities of the Healthy Man for His Own and Others Health."

NEW PUBLICATIONS.

A QUARTER CENTURY OF PUBLIC HEALTH WORK IN MICHIGAN.—By Theo. R. MacClure, Chief Clerk State Board of Health Office, Lansing, Mich. Paper, 7 × 9 ins.; pp. 48; illustrated. Address Board.

This is a review of the work of the State Board of Health of Michigan from 1873 to 1898. There are a number of photographs of members and ex-members of the board.

OHIO STATE BOARD OF HEALTH.—Report for the Year Ending Oct. 31, 1897. C. O. Probst, M. D., Secretary, Columbus, O. Cloth; 7 × 10 ins.; pp. 308; tables and illustrations. Address the Board.

The detailed work of the Board for the year is given in this report, including special reports on new works for water supply and sewerage. There is also a report on tests of mechanical filters at Lorain, O. most of which was published in Engineering News for Oct. 28, 1897.

AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENTS.—Proceedings of the Fourth Annual Convention, Nashville, Tenn., October, 1897. Secretary, D. L. Fulton, Allegheny, Pa. Paper; 6 × 9 ins.; pp. 336; tables, plates and illustrations in the text.

This volume contains a number of valuable papers and reports on street paving, sprinkling, cleaning and lighting, sewerage, water supply, pipe coatings, assessments for public improvements, electrolysis and other subjects.

COTTON FIRES AND COTTON BALES.—By R. H. Scotter, C. E. Publications of the British Fire Prevention Committee, 1 Waterloo Place, Pall Mall, London. Pamph.; 6 × 9 ins.; pp. 16.

This is a brief account of fires in cotton warehouses in Liverpool, and of different systems of baling cotton. The common "turtle-back" form of American bales is condemned as being the most liable to facilitate the breaking out of fire and its spreading into a conflagration, and the new style of round bale adopted by the American Cotton Co. is claimed to be the safest of all.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3 1-2 x 6 ins.; 6 x 9 ins., and 9 x 12 ins.)

WATER WHEELS AND WATER MOTORS.—American Impulse Wheel Co., 120 Liberty St., New York. Pamph., 5¾ × 8½ ins.; pp. 36.

This pamphlet contains illustrations and price lists, etc., of the Cazin impulse wheel for high heads, also of the McCormick turbine for low heads, and the same data for water motors.

PROTECTIVE COATINGS FOR IRON AND STEEL.—W. W. Lawrence & Co., Pittsburg, Pa., and Buffalo, N. Y. Pamph., 5¼ × 6¾ ins.; pp. 15.

This pamphlet contains an interesting discussion of the requirements of a good coating for metal, and advertises the merits of "Permanent Paint No. 2050," and "Asphaltic Bridge Conservative No. 1033."

PAINTING TO PREVENT CORROSION; WITH SPECIFICATIONS. By A. H. Sabin, M. Am. Chem. Soc., M. Am. Soc. M. E., etc., etc. Edward Smith & Co., 45 Broadway, New York. Leather, 3½ × 6 ins.; pp. 80; illustrated. $1.25.

This little book can hardly be called advertising matter in the sense that trade literature ordinarily is. In fact we are informed in the introduction that the greater part of the subject matter was submitted in manuscript to the criticism of numerous prominent engineers, and the contents seem to bear out the statement that unusual care has been taken in other respects to present an unprejudiced scientific treatment of the subject of paints for and the painting of metal work to prevent corrosion. For this reason and because the author has, as is well known, devoted much time to the study of paints for metal work, the book is really a valuable contribution to the literature of the subject. The contents consist of an introductory and somewhat general consideration of the questions of preparing metal surfaces for paint and the best methods of applying the paint itself, which is followed by two sets of specifications, one for the very best character of work and the other for ordinary work. In both cases the author gives, first, the clause of the specification proper and then follows with an explanation of the various reasons for the particular requirements it contains. A different style of type and different colored ink distinguish the specification proper from the explanatory matter. The book closes with a general discussion on the painting of structural work, illustrated by views showing different examples of corrosion on the Washington St. Bridge in Boston, Mass. (Eng. News, Jan. 27, 1898). Scattered through the book are quite a number of illustrations of buildings and other structures whose metal work has been painted with the above company's "durable metal coating," and a separate advertising supplement is devoted particularly to explaining the merits of this and the other paints manufactured by the same firm.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Sept. 15.	Fire alarm system,	Mobile, Ala.	Aug. 11
	Advertised, Eng. News, Aug. 11 to Sept. 1.		
Sept. 15.	Light-house,	Tompkinsville (S. I.), N. Y.	Aug. 25
	Advertised Eng. News, Aug. 25 and Sept. 1.		
Sept. 15.	Asphalt paving,	Bloomington, Ill.	Sept. 8
Sept. 15.	Stone, cement, etc.,	New York, N. Y.	Sept. 8
Sept. 15.	Laying water pipe,	Boston, Mass.	Sept. 8
	Advertised, Engineering News, Sept. 8.		
Sept. 15.	Sewers,	Cleveland, O.	Sept. 8
Sept. 15.	Sidewalks, etc.,	Niagara Falls, Ont.	Sept. 15
Sept. 15.	Paving,	New York, N. Y.	Sept. 15
Sept. 15.	Asphalt paving,	Cedar Rapids, Ia.	Sept. 15
Sept. 16.	Fire hose,	Saginaw, Mich.	Sept. 15
Sept. 16.	Enlarging garbage plant,	Reading, Pa.	Sept. 15
Sept. 16.	Tunnel sewer,	Milwaukee, Wis.	Sept. 15
Sept. 16.	Grading,	Shelton, Conn.	Sept. 15
Sept. 16.	Macadamizing,	Bridgeport, Conn.	Sept. 15
Sept. 16.	Grading, etc.,	Duluth, Minn.	Sept. 15
Sept. 16.	Sewer,	Omaha, Neb.	Sept. 8
Sept. 16.	Asphalt paving, (2 contracts),	Omaha, Neb.	Sept. 8
Sept. 16.	Railway grading (10 miles),	Petersburg, Va.	Sept. 8
	Advertised, Engineering News, Sept. 8.		
Sept. 16.	Pipe sewers (6 miles),	Shelby, O.	Sept. 1
Sept. 16.	Brick and pipe sewer,	Richmond, Ind.	Aug. 25
Sept. 16.	Supplies,	Norfolk, Va.	Aug. 25
	Advertised Eng. News, Aug. 25 and Sept. 1.		
Sept. 17.	Storm sewer,	Manafield, O.	Aug. 25
Sept. 17.	Brick paving,	Watertown, Wis.	Sept. 1
	Advertised, Engineering News, Sept. 1.		
Sept. 17.	Sewers,	Washington, D. C.	Sept. 1
	Advertised, Engineering News, Sept. 1.		
Sept. 17.	Electric plant,	Duncannon, Pa.	Sept. 8
Sept. 17.	Pig lead,	Cleveland, O.	Sept. 8
Sept. 17.	Heating and ventilation,	Danville, Ill.	Sept. 8
Sept. 17.	Steam generators,	League Island, Pa.	Sept. 15
Sept. 17.	Macadamizing,	Rockton, N. Y.	Sept. 15
Sept. 19.	Brick sewer,	Jersey City, N. J.	Sept. 15
Sept. 19.	Water-works and sewers,	Darlington, Okla.	Sept. 15
Sept. 19.	Paving, flagging, etc.,	Jersey City, N. J.	Sept. 15
Sept. 19.	Grading, etc.,	Napa, Cal.	Sept. 15
Sept. 19.	Sidewalks and paving,	Syracuse, N. Y.	Sept. 15
Sept. 19.	Brick paving, etc.,	Patton, Pa.	Sept. 15
Sept. 19.	Brick or stone paving,	Grand Forks, N. Dak.	Sept. 15
Sept. 19.	Grading,	Alameda, Cal.	Sept. 15
Sept. 19.	Sidewalks, etc.,	Indianapolis, Ind.	Sept. 15
Sept. 19.	Steel or wooden bridge,	Walla Walla, Wash.	Sept. 15
Sept. 19.	Building repairs,	Bradford, Pa.	Sept. 15
Sept. 19.	Paving bonds,	Youngstown, O.	Sept. 8
Sept. 19.	School building repairs,	Rochester, N. Y.	Sept. 8
Sept. 19.	Pipe sewers,	Toledo, O.	Sept. 8
Sept. 19.	Heating,	Windsor, N. S.	Sept. 8
Sept. 19.	Electric lighting,	Portland, Ore.	Sept. 1
Sept. 19.	Jail building,	Newport News, Va.	Sept. 1
Sept. 19.	Bridges (2),	Newport News, Va.	Sept. 1
Sept. 19.	Heating and ventilating,	St. Albans, Vt.	Aug. 25
	Advertised Eng. News, Aug. 25 and Sept. 1.		
Sept. 19.	Hospital plans,	San Francisco, Cal.	Aug. 4
Sept. 19.	Jail, Lovelock's,	Nev.	Aug. 18
Sept. 19.	Bridge bonds,	Los Angeles, Cal.	Aug. 18
Sept. 20.	Viaduct,	Cincinnati, O.	Aug. 25
Sept. 20.	Electric light plant,	Grand Rapids, Mich.	Sept. 1
	Advertised, Engineering News, Sept. 1.		
Sept. 20.	Highway,	Rockville, Md.	Sept. 8
Sept. 20.	Hospital building,	Binghamton, N. Y.	Sept. 8
Sept. 20.	Building work,	Brooklyn, N. Y.	Sept. 15
Sept. 20.	Pipe sewers,	Troy, N. Y.	Sept. 15
Sept. 20.	Pipe sewers,	Crafton, Pa.	Sept. 15
Sept. 20.	Sewer pipe,	Schuyler, Neb.	Sept. 15
Sept. 20.	Water bonds,	Strasburg, Pa.	Sept. 15
Sept. 20.	Grading, paving, etc.,	Schenectady, N. Y.	Sept. 15
Sept. 20.	Asphalt paving,	Long Island City, N. Y.	Sept. 15
Sept. 20.	Steel jail,	Dunkirk, N. Y.	Sept. 15
Sept. 20.	Brick sidewalks,	Kansas City, Mo.	Sept. 15
Sept. 20.	Court house repairs,	Charleston, Ill.	Seut. 15
Sept. 21.	Rotary nozzles,	New York, N. Y.	Sept. 15
Sept. 21.	School bonds, ($8,000),	Leroy, N. Y.	Sept. 15
Sept. 21.	Repairing sewers,	Wildwood, N. J.	Sept. 15
Sept. 21.	Water-works,	McComb, Miss.	Sept. 15
Sept. 21.	Incandescent lamps,	Chicago, Ill.	Sept. 15
Sept. 21.	School building,	New Brunswick, N. J.	Sept. 8
Sept. 21.	Water-works,	Bristol, Va.	Sept. 1
Sept. 21.	Canal,	Chicago, Ill.	Aug. 25
	Advertised, Aug. 25 to Sept. 15.		
Sept. 22.	Hospital buildings, etc.,	Central Islip, N. Y.	Sept. 1
Sept. 22.	Electrical apparatus,	Central Islip, N. Y.	Sept. 1
Sept. 22.	Power plant,	Wrightsville, Pa.	Sept. 8
	Advertised, Eng. News, Sept. 8 and 15.		
Sept. 22.	Bridge bonds,	Elyria, O.	Sept. 8
Sept. 22.	Levee work,	New Orleans, La.	Sept. 8
Sept. 22.	Stone jetties, Green Harbor,	Mass.	Sept. 8
	Advertised, Eng. News, Sept. 8 and 15.		
Sept. 22.	Barge,	Biloxi, Miss.	Sept. 15
Sept. 22.	Heating,	Ogdensburg, N. Y.	Sept. 15
Sept. 22.	School building,	Osceola, Wis.	Sept. 15
Sept. 22.	Piles for bridge,	Suffolk, Va.	Sept. 15
Sept. 23.	Sidewalks,	Indianapolis, Ind.	Sept. 15
Sept. 23.	Asphalt paving,	Omaha, Neb.	Sept. 15
Sept. 23.	Road work,	Albany, N. Y.	Sept. 15
Sept. 23.	Asphalt paving,	Niagara Falls, N. Y.	Sept. 15
Sept. 23.	Gravel roads,	Brownstown, Ind.	Sept. 15
Sept. 23.	Cement walks,	North Vernon, Ind.	Sept. 15
Sept. 23.	High-school building,	Camden, N. J.	Sept. 8
Sept. 23.	Supplies,	Watervliet, N. Y.	Aug. 25
Sept. 24.	Capitol building,	Columbus, O.	Sept. 1
Sept. 24.	Electric plant,	Pensacola, Fla.	Sept. 1
Sept. 24.	Quay wall,	San Francisco, Cal.	Sept. 1
Sept. 24.	School building,	Shreveport, La.	Sept. 8
Sept. 24.	Building material,	Pine Ridge, S. Dak.	Sept. 8
Sept. 24.	Street bonds,	Cambridge, O.	Sept. 15
Sept. 26.	Water pump,	Marietta, O.	Sept. 15
Sept. 26.	Electric light plant,	Modesto, Cal.	Sept. 15
Sept. 26.	Bridge substructure,	Westfield, Mass.	Sept. 15
	Advertised, Engineering News, Sept. 15.		
Sept. 26.	Bonds,	Dayton, O.	Aug. 25
Sept. 27.	Municipal building work,	Brooklyn, N. Y.	Sept. 15
Sept. 27.	High school building,	Burlington, Vt.	Sept. 15
	Advertised, Eng. News, Sept. 15 and 22.		
Sept. 28.	School building,	Orange, N. J.	Sept. 15
Sept. 28.	Water-works,	Harrisville, N. Y.	Sept. 15
Sept. 28.	Electric light bonds,	Coffeyville, Kan.	Sept. 15
Sept. 28.	U. S. building,	Brockton, Mass.	Sept. 1
	Advertised, Eng. News, Sept. 1 and 8.		
Sept. 29.	Water-works,	Wivenhoe, England	Sept. 1
Sept. 29.	Court house,	Marietta, Ga.	Aug. 18
Sept. 29.	Steel bridge,	Durango, Colo.	Sept. 15
Sept. 30.	Storm sewer,	Amsterdam, N. Y.	Sept. 15
Sept. 30.	Gravel road (7 miles),	Rockville, Ind.	Sept. 15
Sept. 30.	Water bonds,	Colton, Cal.	Sept. 15
Sept. 30.	School building,	Sheboygan, Wis.	Sept. 15
Sept. 30.	Improving reservoir,	Albany, N. Y.	Sept. 8
	Advertised, Engineering News, Sept. 8.		
Sept. 30.	Coal shaft,	Latrobe, Pa.	Sept. 8
Oct. 1.	Towboat,	St. Louis, Mo.	Sept. 8
Oct. 1.	Arc lighting,	Marshfield, Wis.	Aug. 18
Oct. 1.	Monitors (4),	Washington, D. C.	July 7
Oct. 1.	School building (equipment),	St. Thomas, Ont.	July 7
Oct. 1.	Road roller,	Sheboygan, Wis.	Sept. 1
	Advertised, Engineering News, Sept. 1.		
Oct. 1.	Head-race (power plant),	Montreal, Que.	Sept. 1
	Advertised, Eng. News, Sept. 1 to 15.		
Oct. 1.	Electric plant,	New Richmond, O.	Sept. 15
Oct. 1.	Arc lighting,	Huntington, W. Va.	Sept. 15
Oct. 1.	School building,	Sitka, Ala.	Sept. 15
Oct. 3.	Block pavement,	Toledo, O.	Sept. 15
Oct. 3.	Superstructure and repair,	Chillicothe, O.	Sept. 15
Oct. 3.	Street work,	Toledo, O.	Sept. 1
Oct. 3.	Building plans,	Liverpool, England	Sept. 8
Oct. 3.	Building superstructure,	Philadelphia, Pa.	Sept. 8
	Advertised, Eng. News, Sept. 8 and 15.		
Oct. 3.	Bridge,	Flandreau, S. Dak.	Sept. 8
Oct. 4.	Coal conveyors, etc.,	Chicago, Ill.	Aug. 25
	Advertised, Eng. News, Aug. 25 to Sept. 29.		
Oct. 4.	Bridge,	Stockton, Cal.	Sept. 15
Oct. 4.	Brick paving, etc.,	Norwalk, O.	Sept. 15
Oct. 5.	Granite paving,	Cincinnati, O.	Sept. 15
Oct. 5.	Bridge superstructure,	Chicago, Ill.	Aug. 11
Oct. 5.	Dredging,	Oakland, Cal.	Sept. 8
Oct. 5.	Shore protection, Fort Morgan,	Ala.	Sept. 8
	Advertised, Eng. News, Sept. 8 to 29.		
Oct. 10.	Turbine wheels (24),	Wrightsville, Pa.	Sept. 8
	Advertised, Eng. News, Sept. 8 and 15.		
Oct. 10.	Trestle,	Chehalis, Wash.	Sept. 8
Oct. 10.	Paving,	Toledo, O.	Sept. 15
Oct. 12.	Hospital buildings,	San Francisco, Cal.	Sept. 15
Oct. 12.	Park bonds,	Spokane, Wash.	Sept. 1
Oct. 13.	Hire of dredging plant,	Mobile, Ala.	Sept. 15
	Advertised, Eng. News, Sept. 15 to Oct. 6.		
Oct. 14.	Cement walks,	North Vernon, Ind.	Sept. 15
Oct. 17.	Gasholder, etc.,	Edinburgh, Scotland	Sept. 1
Oct. 21.	Dry dock,	Algiers, La.	Sept. 8
Oct. 24.	Markets, etc.,	Belem, Brazil.	Apr. 28
Oct. 25.	Jetties,	Portland, Ore.	Aug. 25
	Advertised, Eng. News, Aug. 25 to Sept. 15.		
Oct. 30.	School building,	Chehalis, Wash.	June 16
Oct. 31.	Water supply,	Cobourg, Ont.	Sept. 8
	Advertised, Eng. News, Sept. 8 to Oct. 27.		
Oct. 31.	Electric lighting,	Cobourg, Ont.	Sept. 8
	Advertised, Eng. News, Sept. 8 to Oct. 27.		
Nov. 1.	Court house,	Garner, Ia.	Sept. 8
Dec. 31.	Plans for station, etc.,	Stockholm, Sweden.	June 23
Jan. 1.	City hall plans,	Bridgeport, Conn.	Aug. 18

RAILWAYS.

ARIZONA.—Press reports state that M. Loewenstein and Max Cohn, owners of the King of Arizona mine at Camp Gleason, are making preparations to build a narrow-gage railway from their property to their mill at Mohawk, Ariz., on the Gila River, a distance of 35 miles.

ATCHISON, TOPEKA & SANTA FE.—B. Lantry Sons, Strong City, Kan., inform us that they will continue to supply Santop rock ballast until cold weather sets in for use on this company's main line west of Kansas City. They have been furnishing about 50 carloads a day all summer.——Reports state that this company has begun the building of a long switch extending three miles east of Mulvane, Kan., to the farm of Ross Stubbs in Sedgwick county, where a rich field of agatite has been found, and for the mining of which a company has been organized and capitalized to the amount of $50,000. W. H. Earl, Res. Engr., Newton, Kan., informs us that this is only a short track running out to proposed cement works.

ATLANTIC & LAKE SUPERIOR.—Reports from Canada state that those interested in the Atlantic & Lake Superior Ry. have succeeded in floating its bonds in England, and the construction of the proposed extension will begin at once. J. M. Shanly, Ch. Engr., New Carlisle, Que.

AVOYELLES.—This company has been chartered, with a capital stock of $150,000, to operate the old St. Louis, Avoyelles & Southwestern Ry., 36 miles in length, and to construct extensions thereto. Pres., W. B. Spencer, New Orleans; Vice-Pres., Nathan G. Pearsall, Marksville, La.

BRANTFORD & WOODSTOCK.—Reports state that a new line will be surveyed from Brantford to Niagara Falls, via Hamilton, Ont., to connect with the Brantford & Woodstock Ry. W. H. Mitchell, of Kingston, Ont., is said to have a contract for ten miles of grading from Woodstock to Burford, work to be finished by Oct. 15.

CANTON, ABERDEEN & NASHVILLE.—First Vice-President Welling; Second Vice-President Harahan, and Engineer G. B. Fitzhugh, all of the Illinois Central Railway, have been authorized by the Secretary of State of Alabama, to receive subscriptions to the amount of $1,000,000, to the capital stock of this proposed railway from Aberdeen, Miss., to Winfield, Ala., a distance of about 100 miles.

CHICAGO, INDIANA & EASTERN.—Fremont Wilson, Ch. Engr., Fairmount, Ind., informs us that construction work is now under way on the extension of this line between Swayzee, Ind., and Fairmount, a distance of 11 miles. Grading has been completed between these points, and track has been laid within five miles of Swayzee. Work will begin on the extension of the line to Converse, about five miles farther, as soon as track has been laid to Swayzee. This company now has ten miles of railway in operation from Fairmount to Matthews, and an extension from Matthews southeasterly to Richmond is contemplated which will make the completed line from Converse to Richmond about 75 miles in length. Pres., Eugene Stewart, 100 Washington St., Chicago, Ill.

CHICAGO, MILWAUKEE & ST. PAUL.—Reports state that this company has a corps of surveyors at work between Lynn and Stanley, Wis., a distance of about 35 miles, preparatory to a possible extension of its line from the present terminus, near Lynn, to Stanley, on the Wisconsin Central Ry. D. J. Whittemore, Ch. Engr., Chicago, Ill.

CHOCTAW, OKLAHOMA & GULF.—It is announced that Pres. Francis I. Gowan, of Philadelphia, has authorized Henry Wood, Gen. Mgr., to organize a new corporation, to be known as the Choctaw & Memphis R. R. Co., to extend this railway from Wister Junction, Ind. Ter., to a connection with the Little Rock & Memphis R. R. at Little Rock, Ark., a distance of about 150 miles. Surveys are now in progress, and work is expected to commence as soon as locations are made. The citizens of Little Rock have been asked to raise $100,000 to aid in the construction of the road. F. A. Molitor, Ch. Engr., South McAlester, Ind. Ter.

COLUMBIA & WESTERN.—Over 2,000 men are now said to be at work on the construction of the Robson & Penticton branch of this railway now in process of construction from Robson to Midway, B. C., a distance of 105 miles. About 25 sub-contractors are at work between Robson and a point 25 miles west of Brooklyn, under the supervision of the general contractors, Mann, Foley Bros. & Larsen. The contract for constructing the bridges has been let to Porter Bros., McArthur & Roberts, and that for getting out the timber and ties for the line, to the Peter Genelle Mill Co., of Naskup, B. C., and McPherson Bros. & Stout. It is said that about 5,000,000 ft. of this lumber will be used. J. W. Stewart, Supt. of Construction; F. P. Gutelius, Acting Ch. Engr, Trail, B. C.

CRYSTAL RIVER.—Reports state that the main line of this railway will be extended from Glenwood Springs to Hotchkiss, Colo., on the north fork of the Gunnison River. From Pitkin county a line will be built to Delta, in order to connect with the Denver & Rio Grande. The capital stock is $100,000 and the incorporators are, J. C. Osgood, A. C. Cass, D. C. Beaman and J. A. Kebler.

DOOLEY SOUTHERN.—About 8 miles of this new line have been completed from Richwood to Pinia, Ga. A further extension of 27 miles to Irvinville is under way. Pres., B. P. O'Neal, Richwood, Ga.

GALESBURG & GREAT EASTERN.—This company was incorporated, Sept. 6, with a capital stock of $250,000, to construct and operate a railway to connect Galesburg and Lacon, via Etherly, Ill. The incorporators and directors are, Henry Harms, Edward J. Harms, Henry J. Harms, Adam Harrer, Albert J. Harms, Willis Smith, John W. Smith, all of Etherly. Twelve miles of the line have already been in operation between Galesburg and Etherly.

GREAT NORTHERN.—Work has been completed on the extension of the East Minnesota branch from Fosston to Deer River, Minn., 98 miles, and from Cloquet, Minn., to the Nemadji River Bridge, 28 miles, thus giving the railway an entrance into Duluth over the Duluth, Superior & Western Ry., which is now under this company's control. A. Guthrie & Co., St. Paul, Minn., were the contractors.

GULF, BEAUMONT & KANSAS CITY.—Jas. F. Weed, Ch. Engr., Beaumont, Tex., writes us that this company is extending its road from Kirbyville to Jefferson, under the charter of the Gulf, Beaumont & Great Northern R. R. The first 10 miles from Kirbyville to Gibraltar is now under construction. The line is located to San Augustine and the location is being rapidly pushed forward from San Au-

gustine to Jefferson, Tex., via Center. The road is chartered from Sabine Pass to Paris, Tex., a distance of 350 miles. It is expected to build at once the 100 miles from Kirbyville to Jefferson, and immediately thereafter the south division from Beaumont to Sabine Pass. From Kirbyville to San Augustine, a distance of 70 miles, the road passes through the virgin pine forests of East Texas, and there will be no competition for any business originating between the Neches and the Sabine rivers. From San Augustine to Jefferson, and on to Paris, the road passes through the richest agriculaural district of Texas. With deep water facilities at Sabine Pass, and in connection with the Gulf, Beaumont & Kansas City Ry., this railway should do an immense business in lumber traffic to the North and export freight to the South. It will connect with the Missouri, Kansas & Texas, the St. Louis & Iron Mountain, the Houston, East and West Texas, and the Texas Pacific railways, between Center and Jefferson.

HOLLY RIVER & ADDISON.—This company was incorporated in West Virginia, Sept. 10, with a capital stock of $600, to construct a steam railway between Palmer Junction, on the West Virginia & Pittsburg R. R., to Addison, W. Va., a distance of from 15 to 20 miles. The incorporators are G. W. Curtis, Sutton, W. Va.; J. M. Marple, Marpleton, W. Va.; Chas. R. Durbin, Grafton, W. Va.; J. H. Brewster, Brewster, W. Va.; J. T. McGraw, Grafton.

HOLSTON VALLEY.—W. T. Neeley, Secy. and Treas., Bristol, Tenn., informs us that this company has not yet made any plans for extending its line to Shady, Tenn. The road is at present operated from Bristol to Big Creek, a distance of 16 miles.

INDIANA, ILLINOIS & IOWA.—Press reports state that it has been decided to extend this line, the original Chicago Outer Belt System, from Streator, Ill., to a point on the Mississippi River, near Keithsburg or Muscatine, Ia., a distance of about 175 miles. Two corps of surveyors are now in the field, and it is expected that construction will soon be commenced; estimated cost, $750,000. D. Nowlan, Engr. Maintenance of Way, Kankakee, Ill.

INDIANA STONE.—The Eureka Lumber Co. is reported to have been awarded the contract for building this proposed branch of the Chicago, Indianapolis & Louisville Ry. from Clear Creek to Harrodsburg, Ind., a distance of ten miles. Work is to begin soon.

LAUREL & NORTHWESTERN.—Governor McLaurin, of Mississippi, Sept. 5, issued a proclamation permitting the organization of this company, which will build a railway through the counties of Jones and Covington. C. C. Miller, of Meridian, Miss., is said to be at the head of the enterprise.

MEXICAN CENTRAL.—Reports state that about 40 miles of track has been laid on the new extension of this line from Jiminez to Parral, Mexico, a distance of about 55 miles. L. Kingman, Ch. Engr., Mexico, Mex.

MIDLAND OF NOVA SCOTIA.—Reports state that construction work on this line, between Windsor and Truro, N. S., is progressing rapidly, and it is expected that the grading of the 40 miles between Windsor and the Shubenacadie River will be completed by the end of next month. The work of grading and constructing a bridge over the St. Croix River will probably be completed this fall, but no rails will be laid until next spring. It is expected to open the line to traffic about the middle of next summer. Pres., William Strachan, Montreal, Que.

MISSISSIPPI VALLEY.—H. A. Schwanecke, Ch. Engr., Marshall, Mo., informs us that no work is at present under way on this new line of railway, but that it is expected to resume the construction this fall. The proposed route is from East St. Louis to Cairo, via East Carondelet, Harrisonville, Prairie du Rocher, Kaskaskia, Chester, Rockwood, Leo Rock, Grand Tower, Gray's Point and Thebes, a distance of 151 miles. The location has been made of the whole line and construction commenced on 23 miles, between Chester and Leo Rock, besides ten miles being graded south of Harrisonville. A large part of the right of way has also been obtained between Grand Tower and East St. Louis. The firms holding the contracts are the Ware Construction Co., the Massachusetts Tie Co., Cahill & Co., and the St. Louis Bridge & Iron Co., all of St. Louis, Mo. Pres., Thos. N. Chase, St. Louis.

NORTHERN OF KANSAS CITY.—This company was incorporated in Missouri Sept. 3, with a capital stock of $125,000, to build and operate a standard gage railway from Trimblo, in Clinton county, to Gower, in Buchanan county, a distance of eleven miles. The incorporators are Robert Gillham, C. A. Braley, J. T. Nolthenius, F. B. Wilcox and B. N. Simpson, all of Kansas City, Mo.

NORTHWEST.—Isaac E. Blake, Pres., 11 Broadway, New York, informs us that contracts will be let immediately for the construction of this proposed railway from Nagle to Oxbow, via Connor Creek, Flickbar and Powder, Ore., a distance of 55 miles. The surveys have been completed and some preliminary work done; a tunnel and several bridges will have to be built. The total issue of $1,100,000 of bonds has been fully and responsibly disposed of. Carlos Gillespie, Ch. Engr., Huntington, Ore.

ONTARIO & RAINY RIVER.—William Heald, Toronto, Ont., is said to have received the contract for constructing the first 20 miles of this railway, which is proposed to connect a point on the Port Arthur, Duluth & Western, 22 miles west of Port Arthur, Ont., and the Manitoba boundary.

OREGON & MISSOURI NORTHERN.—This company was incorporated in Missouri Sept. 3, with a capital stock of $100,000, to construct and operate a railway from a point in Holt county, on the Kansas City, St. Joseph & Council Bluffs R. R., to Oregon, a distance of five miles. The incoroporators are Irving H. Wheatcroft, A. J. Clark, C. B. Holmes, George G. Moore and others, of Sweetwater, Tex., most of whom are connected with the Colorado Valley Ry. Co.

PERU.—Consular reports state that surveys are being made for a railway to be built from Pacasmayo, on the Pacific coast, to the coal district in the province of Hualgayoc, near the summit of the Andes, 121 miles distant, in order to develop the mining district conceded to C. B. Jones in 1892. A line is already in operation from Pacasmayo to Yonan, 41 miles. G. Clinton Gardner, formerly superintendent of the Pennsylvania R. R. and builder of the Mexican National Ry., states that the cost of constructing the line and purchasing the rolling stock should not exceed $3,000,000.

ST. LOUIS & SAN FRANCISCO.—B. Lantry & Son, Strong City, Kan., are furnishing this company with rock ballast.

SIERRA OF CALIFORNIA.—The West Coast Construction Co. is reported to have sub-let a portion of the contract for extending this line from Jamestown to Sonora, Cal., 20 miles; to Erickson Bros., of San Francisco. Pres., Prince A. Poniatowski, San Francisco, Cal.

STATESBORO & EGYPT.—This company has been organized in Statesboro, Ga., according to reports, to construct a railway from Statesboro to a connection with the Florida Central & Peninsula R. R., 31 miles distant. W. C. Parker and R. Simmons are among those interested.

WISCONSIN & MICHIGAN.—S. M. Fischer, Pres., Old Colony Bldg., Chicago, Ill., informs us that T. McGrath, of Green Bay, Wis., has been awarded the contract for the construction of an eight-mile extension of this railway north of Fairthorn Junction, as stated in our last issue. Work has begun in clearing the right of way and graders' tools are on the ground. After having located the line farther on, it is expected to let the contract for constructing eight additional miles of line, which will then terminate at Quinnesec, Mich.

STREET AND ELECTRIC RAILWAYS.

LEWISTON, ME.—John A. Jones, Ch. Engr., Lewiston, Brunswick & Bath Electrical R. R. Co., Lewiston, informs us that this new line has been completed, and that regular trips are now being made over the entire route from Lewiston to Brunswick, via Lisbon, Topsham and Bath, a distance of 36 miles, with a branch from Lewiston to Sabatus about six miles in length. Pres., A. L. Shaw, Bath, Me.

DEDHAM, MASS.—W. W. Mitchell, Pres, Norfolk Western St. Ry. Co., Medfield, Mass., informs us that contracts are now being let for constructing this proposed electric line between Medfield and Dedham, via Westwood, a distance of nine miles. Engrs., Hodges & Harrington, 60 State St., Boston Mass.

FITCHBURG, MASS.—The Gardner, Westminster & Fitchburg Ry. Co. was granted a franchise Sept 6 to construct a street railway to the Westminster town line. This company first petitioned the board of aldermen in October, 1896, but has been opposed by the Fitchburg & Westminster Co.

PLYMOUTH, MASS.—It is reported that the directors of the Plymouth & Sandwich St. Ry. Co. have voted to proceed with building operations, and that a committee has been directed to award contracts for construction work as far as White Horse Beach. Engrs., Harriman Bros., 3 Somerset St., Boston. Address D. E. Damon, Plymouth.

WATERTOWN, MASS.—The Newtonville & Watertown St. Ry. Co. has petitioned the selectmen of Watertown for permission to lay an additional track in Main St., from Watertown Square to Beacon Square. The railway runs from Needham to Allston, through Newtonville and Watertown, and is a single track line from Newtonville to Allston.

WEST SPRINGFIELD, MASS.—It is reported that the West Springfield & Agawam Ry. Co. has been organized to build a trolley line to Agawam. Among those interested are, Jesse W. Starr, George A. Hill, M. L. Tourtellotte, W. B. Chandler, Frank S. Rice, H. L. Morton, H. L. Inman and F. M. Robbins, all of West Springfield.

WHITMAN, MASS.—G. H. Peanon, Town Clk., informs us that the Brockton and Whitman electric railway, which it is proposed to build through this place, has all been surveyed. A town meeting will be held Sept. 23 to consider the application of the company for a franchise.

ALBANY, N. Y.—Surveys are said to be in progress by the Albany Ry. Co. for a new belt line to extend through Delaware Ave., from Madison Ave. and then to Grand St. Edgar S. Fassett, Gen. Mgr.

HOOSICK FALLS, N. Y.—The power station of the Bennington & Hoosick Valley Electric Ry., at Hoosick Falls, was wrecked in a storm Sept. 8 causing damage estimated at $3,500. C. B. Story, Gen. Mgr.

NEW HARTFORD, N. Y.—A hearing will be held at the Cottage Hotel, Utica, on Sept. 24 to consider the application of the Utica Belt Line St. R. R. for a franchise to build in the town of New Hartford.

NEW YORK, N. Y.—The work of changing the motive power of the Broadway cable line of the Metropolitan St. Ry. Co., to electricity, was begun Sept. 9 with a force of about 200 men. Pres., H. H. Vreeland.

NYACK, N. Y.—Press reports state that the Nyack Traction Co. was organized at the office of A. B. Wigus, 36 Wall St., New York, on Sept. 8, and H. C. Howard appointed president. It is said that surveys for the proposed trolley line will soon be started in order to complete the work before winter sets in.

OSWEGO, N. Y.—Reports state that F. H. Tidman, Receiver of the Lake Ontario & Riverside Ry. Co., has been authorized to issue $15,000 in certificates in order to pay for new rails and a portion of the paving in Bridge St.

YONKERS, N. Y.—It is announced that the Yonkers R. R. has been purchased by the Union Ry. Co., and that it is proposed to extend the track through Dobb's Ferry and Irvington to Tarrytown.

ELIZABETH, N. J.—The Elizabeth St. Ry. Co., which operates a horse-car line on East Grand, New Smith and East Jersey Sts., petitioned the council for a franchise Sept. 6 to change the motive power to the overhead trolley system. A hearing on the application will be given on Sept. 24.

EASTON, PA.—Mayor Hartzell vetoed the ordinance Sept. 6 granting permission to the Easton, Palmer & Bethlehem Electric Ry. to enter the city. The line connects Easton with Bethlehem and is almost completed.

PITTSBURG, PA.—The Pittsburg & Birmingham Traction Co. has under consideration the extension of its line to Whitehall, via Becks Run. The residents of Baldwin township ask for a 5-cent fare and promise the company franchises to Castle Shannon, a distance of over five miles. Pres., Harry Moore.

BALTIMORE, MD.—It is reported that the Baltimore & Northern Electric Ry. Co. has awarded the contract for the stringing of additional feed wire to carry the increased power, which the company is to take from the Belt power house of the Baltimore & Ohio R. R., to J. G. White & Co.

PETERSBURG, VA.—The Petersburg Electric St. Ry. will be sold on Nov. 10, by order of the corporation court. About three miles of line are now in operation.

CHIPPEWA FALLS, WIS.—The Chippewa Valley Electric St. Ry. Co. ran its first car in this city Sept. 1. The line being constructed by this company between this city and Eau Claire may be opened about Sept. 15.

DE PERE, WIS.—The Fox River Electric Ry. Co. has asked the council of De Pere for a franchise to extend its line into that city. Receiver, Mitchell Joannes, Green Bay.

LAWRENCE, KAN.—The Lawrence Ry. Co. was incorporated in Kansas Sept. 6 with a capital stock of $250,000, to build a system of electric railway at Lawrence to handle passengers, freight and mail; the entire line will be 9.89 miles in length. The main line will run from Bismark Grove, in North Lawrence, past the Union Pacific depot and over Massachusetts St. out to Haskell institute; with branches from Massachusetts St. to the state university, the Santa Fe depot, Kentucky St., the McCook Athletic Park, to the cemetery, and from Mississippi and Warren Sts. to the university. The directors are, R. W. Ludington, T. J. Sweeney and S. P. Moore, of Lawrence; C. W. Kincaid, William S. Hooper and Frank Kern, of Mattoon, Ill.; W. D. Ewing, Boston, Mass.

CLAYTON, MO.—The St. Louis county court Sept. 3 granted a franchise to the St. Louis & Kirkwood R. R. Co. to construct a cross county connecting line from the Houseman Air Line, at Brentwood, through Clayton to De Hodiamont, to the main line of the St. Louis & Suburban Ry., thus giving a continuous line from Meramec Highlands to Florissant, and providing the Suburban system with three routes from Meramec Highlands, Kirkwood and Webster Groves to the center of St. Louis. Work must be begun within three months after accepting the franchise.

ST. LOUIS, MO.—Press reports state that the St. Louis, Fenton & Southwestern R. R. Co. will be incorporated within a few days in Missouri, with a capital stock of $1,000,000, to construct 44 miles of electric railway from the city limits, at a connection with the St. Louis, Iron Mountain & Southern R. R. and the Southern Electric Ry., through Fenton to Ware. It is said that work will begin this month, and that the third-rail system will be used. Pres., Thos. F. Sneed.

GAINESVILLE, TEX.—J. M. Lindsay, Pres. Gainesville Park St. Ry. Co., Gainesville, informs us that this company, which was incorporated Aug. 23, already has over four miles of line in operation, and that it also has the right of way and authority to build on all of the streets in this city. It is expected to make the present system eight miles in length. J. Bragellon, Ch. Engr.

ALHAMBRA, CAL.—The people of this place are considering a proposition of the Terminal Ry. Co. to extend its main line, when electricity is installed thereon, from South Pasadena to Alhambra, a distance of three miles.

MEXICO CITY, MEXICO.—Reports from Mexico City state that the Federal District St. Ry. Co. of that city has submitted plans for approval for building an electric street car line to the national department of public works. It is said to be the ultimate intention of the company to equip all of its line in the City of Mexico with electricity; the improvement first to be applied to the Guadaloupe & San Angel line, which traverses the most thickly populated part of the city and runs to many suburbs. The principal power house will be located in what is known as the Indianilla district. The relaying of the track for electric traction and the installation of machinery and conduits will require about eighteen months.

ROME, ITALY.—Press reports state that the Italian Meridonal R. R. Co. at Rome, has just resolved upon the construction of an electric railway between Mandela and Subiaco, in the Province of Rome, and that it is proposed to utilize the water power of the Anniera River for the production of the motive power.

ELECTRIC LIGHT AND POWER.

LEWISTON, ME.—Press reports state as follows: A deal has been closed whereby the Androscoggin Water Power Co. delivers to a syndicate, represented by Waldo Pettingill, Rumford Falls, Me., 67,000 acres of wild land in Oxford county for $200,000. H. Plummer, of Lisbon Falls, Me., is agent of the power company.

BAINBRIDGE, N. Y.—C. C. Hovey has been granted a franchise for a plant, according to reports.

CAZENOVIA, N. Y.—Thos. O'Connell, of Cortland, N. Y., and Jno. O'Connell, of Marathon, N. Y., propose to built a plant.

SYRACUSE, N. Y.—Local papers state that the council will probably soon ask for bids for furnishing and installing a plant for the city hall to cost about $2,000. Alderman Segar, Chn. Finance Com., may be addressed.

CAMDEN, N. J.—Thos. Stephen, Arch., 302 Masonic Temple, Camden, is preparing plans, estimates, etc., for a 5-story warehouse and light manufacturing building to cost $25,000, an addition to the Camden high school building, and also for a pen factory, to cost $50,000. These buildings will require pumps, dynamos, engines, boilers and shafting. Mr. Stephen wishes to correspond with manufacturers.

BRADDOCK, PA.—The question of building a municipal plant to cost about $12,000 is being considered; population, 15,000. It is proposed to have the plant light North Braddock and Rankin as well as this city.

LANSDALE, PA.—The council, it is stated, has let the contract for furnishing and installing a plant to the General Electric Co., Schenectady, N. Y. The plant is to be completed in about 80 days.

ST. CLAIR, PA.—The council proposes to purchase a new 100-HP. steel boiler and a 100-ft. smokestack for the plant, according to reports. Chn. Com., C. J. Fame.

BALTIMORE, MD.—Mayor Malster has signed the ordinances authorizing the construction of the proposed system of underground conduits for the electric wires. The city will issue $1,000,000 of 3½% bonds at once for the work. The electrical commission will at once appoint an engineer to prepare plans and specifications and to superintend the construction.

HUNTINGTON, W. VA.—Bids are asked until Oct. 1 for furnishing 75 2,000-c. p. arc lights, according to reports. Cy. Clk., C. T. Taylor.

McADENSVILLE, N. C.—R. G. Love, Gastonia, N. C., proposes to build an electric plant in connection with the new cotton mill about to be built in this place.

COLUMBIA, S. C.—The Granby Cotton Mfg. Co. has increased its capital stock to $800,000, for the purpose of enlarging its mills and also the electric plant.

SPARTANBURG, S. C.—The Whitner Co., Anderson, S. C., has contracted to build a new plant at this place. The plant of the Aetna Light & Power Co., of this city, has been ordered sold, and the sale will take place at once. For further information see our issue of Aug. 11. Vice-Pres., Eliot Norton, 100 Broadway, New York.

OCALA, FLA.—The council is arranging to issue $15,000 in bonds for improving the plant, according to reports.

PENSACOLA, FLA.—Bids are asked until Sept. 24 for installing a light and power plant at the navy yard in this city. The appropriation for the work is $10,000. Mordecai T. Endicott, Chief Bureau Yards and Docks, U. S. N., Washington, D. C.

HOUMA, LA.—Wilson & Jastremski, Houma, have been granted a 15-year franchise. Work on the plant, it is stated, will begin at once.

NEW IBERIA, LA.—A. J. Cammack, Secy. and Attorney, writes us that the election called for Oct. 17 to vote on the question of a plant and water-works will probably be changed to a later date on account of irregularities in securing signatures to the petition. Nothing can be done until after the election. Population, 7,000.

NEW ORLEANS, LA.—Cohn & Ber and T. M. Miller & Co. have applied for franchises to erect plants and to light this city. Miller & Co. purpose to begin the construction before July 1, 1899, and to have $25,000 worth of work completed in one year from that date.

THIBODEAUX, LA.—The question of building a plant by special tax will probably be voted upon at the election in November.

NATCHEZ, MISS.—Maurice Moses, Pres., writes us that bids will be asked about the end of the month for furnishing the materials and for building the proposed plant to be owned by A. & M. Moses. It will be operated by steam, and will have a capacity of 120 2,000-c. p. arc and 2,000 16-c. p. incandescent lights. The Natchez Light, Power & Transit Co. will be incorporated. The entire plant is yet to be purchased. The city has made a contract to take 100 arc lights.

NEW RICHMOND, O.—Bids are asked until Oct. 1 for furnishing and building a plant to be operated by steam. It will have a capacity for 40 2,000-c. p. and 1,000 16-c.

p. lights; estimated cost, (probably with water-works), $30,000. Des. Engr., E. L. Layman, 32 East 3d St., Cincinnati, O.

COLUMBUS, O.—Councilman Beard introduced a resolution Sept. 6 authorizing the council to rescind the contract with the Columbus Electric Light & Power Co. for lighting this city, the arc lights, it is alleged, not being up to the contracted candle power.

NEW ALBANY, IND.—The Light, Heat & Power Co. has been granted permission to build a 2-story brick addition to its power house, according to reports. Mgr., M. Ruthenberg.

DECATUR, MICH.—The council will soon ask for bids for furnishing and building a plant, according to reports.

HOUGHTON, MICH.—The Peninsula Electric Light & Power Co. has increased its capital stock from $150,000 to $200,000. Mgr., L. E. Morgan.

ST. LOUIS, MICH.—As the regularity and sufficiency of the board of public works of this city has been questioned, notice is given that no bids were opened Sept. 9 for building a plant, and that none will be opened Sept. 26 for the purchase of $20,000 of 4% bonds for the work. New proceedings will be commenced as soon as possible toward securing the improvement. Clk., Jno. R. Wilson; Mayor, Parker Merrill.

CHICAGO, ILL.—Bids are asked until Sept 21 for furnishing incandescent lamps for the public library building. Secy, W. B. Wichersham.

GREENUP, ILL.—W. H. Cuningham, Village Clk., writes us that bids were received Sept. 10 for furnishing and building a plant. The specifications were amended so as to entirely cut out the incandescent service, and also modified as regards size of poles, quality of wire. Poles were substituted for arms for supervision of street lights. The bids were as follows:

Bidder.	Original bid.	Amended bid.
Advance Electric Co.*	$3,455	....
Griswold & Kline, Casey, Ill.	2,900	$1,950
R. A. Gay, Effingham, Ill.	5,600	1,975
Sanborn Electric Co.†	3,565	2,535

*8 W. Market St., Indianapolis. †22 E. Ohio St., Indianapolis.

SALEM, ILL.—T. C. Reed & Co., Chicago, have been awarded the contract, at $9,000, for furnishing the machinery and installing a plant with a capacity of 50 2,000-c. p. arc and 1,500 16-c. p. incandescent lights.

RICHLAND CENTER, WIS.—A committee is reported to have been appointed to investigate the question of putting in a plant. E. R. Stevens may be addressed.

PUFFALO CENTER, IA.—B. S. Wilder, Lake Mills, Ia., is reported as arranging for the immediate construction of a plant.

HARTLEY, IA.—The council is reported as considering the question of building a plant, according to reports.

SEYMOUR, IA.—The question of building a plant and water-works is being considered.

LITTLE FALLS, MINN.—An election will be held Oct. 4 to vote on the question of issuing $60,000 in bonds for a municipal plant and water-works. It is estimated that the plant will cost about $9,500, and that water-works about $40,000.

PERHAM, MINN.—Chas. F. Loweth, 94 East 4th St., St. Paul, has furnished plans for a plant with a capacity for 7 arc and over 300 incandescent lights, and for a water-works system.

WEST SUPERIOR, WIS.—Press reports state that the council has voted to award a city lighting contract to the Superior Water, Light & Power Co., the company having agreed to furnish lights at the same price that Wm. Burgess did in his proposition, noted under Contract Prices last week, and which the council previously accepted. The basis for the contract is $80 a light of 2,000-c. p.

WAYNE, NEB.—The John T. Burke Electric Supply Co., Omaha, Neb., has been awarded the contract for furnishing and building a plant.

COFFEYVILLE, KAN.—Bids are asked until Sept. 28 for the purchase of $17,000 of 6% electric light bonds. Cy. Clk., D. S. Elliott.

WICHITA, KAN.—The council has been petitioned to build a municipal plant. The council is having trouble with the Wichita Light, Gas & Power Co., which is reported by local papers as removing its lamps. A new company is said to be figuring on putting in a plant. W. H. Herbig, of the committee, and Councilman Volk may be addressed.

SHELBINA, MO.—This place voted Sept. 6 to issue $5,000 in bonds for extending the plant. Supt., E. P. Weaver.

HENRIETTA, TEX.—A company is being organized to build a plant, according to reports. E. B. Carver may be addressed.

MASON, TEX.—V. M. Loring, Secy. Mason Electric Light Co., writes us that the contract for the plant has been let. It will be operated by steam and will have a capacity for 400 16-c. p. incandescent lights; estimated cost, $5,500. Des. Engr., Wm. G. Schwirth, San. Antonio, Tex.

COLORADO SPRINGS, COLO.—Geo. W. Jackson, of Colorado Springs, has been granted permission to furnish electricity from the water from Pike's Peak for light and power purposes. Z. G. Simmons, Vice-Pres., Manitou & Pike's Peak Ry. Co., may be addressed.

TACOMA, WASH.—C. B. Talbot, Civil Engr., Tacoma, has submitted a proposition to have the city own its plant. Mr. Talbot's scheme is to bring power generated by the south fork of the Puyallup River, which can be made to furnish 7,000 HP. He wants the city to tap the river 26 miles from town, construct a ditch 8 ft. deep and 38 ft. wide for a distance of about 20 miles, to come to an end three miles from Maplewood Springs, where a fall of nearly 300 ft. can be secured. Estimated cost, $100,000.

HEALDSBURG, CAL.—C. H. Pond, Clk., writes us that the following bids were received Aug. 26 for furnishing and building a plant and water-works: California Bridge Co., San Francisco, Cal., $35,400; A. W. Garrett, Healdsburg, city distributory, $24,986; San Francisco Bridge Co., $32,514; James Stanly, $29,640; Williaus Bilser, $29,260; C. D. Vincent, $36,250. The contract for the electric plant was let to Jas. Stanly, San Francisco, and that for the water-works to the San Francisco Bridge Co., San Francisco.

LOS ANGELES, CAL.—It is proposed to enlarge the plant at the Soldiers' Home. Maj. Wm. H. Bonsall, Soldiers' Home, Cal., may be addressed.

MODESTO, CAL.—Bids are asked by the clerk of the board of trustees until Sept. 26 for furnishing a plant in connection with the water-works.

SANTA ANA, CAL.—A company has been organized to build a plant in this city at a cost of about $15,000.

WILLIAMS, ARIZ.—It is stated that the council will build a plant in this place at once.

HAMILTON, ONT.—The council has engaged Percy Domville, Elect. Engr., Hamilton, to make a complete report upon the cost of installing a municipal electric light and power plant capable of providing 400 arc lights of 2,000-c. p. and 3,000 incandescent lights of 16-c. p., with provision for enlargement to meet the city's requirements for the next 20 years. The report is to include an estimate of the annual cost of operation. S. H. Kent, Asst. Cy. Clk.

BRUSSELS, BELGIUM.—Geo. W. Roosevelt, U. S. Consul at Brussels, states in a report that in view of the increased use of electricity in this country there is a good opportunity for the introduction of American electric apparatus.

NEW COMPANIES.—Santa Anna Water Power Co., Gonzales, Texas; $5,000; to construct a dam across the Guadalupe River and to utilize and control the water power created thereby: R. S. Dilworth, F. R. Starr, Jr., C. T. Rather, G. W. Betts, J. W. Nixon.

BRIDGES.

BOSTON, MASS.—A contract has been awarded to Woodbury & Leighton, at $15,795, for the Boston approach to the Charlestown bridge.

WESTFIELD, MASS.—Bids are asked until Sept. 26 for constructing the abutments, retaining walls and foundations for the new bridge over Little River, at Main St., as described in our advertising columns. O. A. Granger, Chn. Com.; O. E. Parks, Town Engr.

SUFFOLK, VA.—Bids are asked until Sept. 22 for furnishing and driving 36 cypress piles at the bridge across Nansemona River. R. R. Smith, Clk.

WELDON, N. C.—The Atlantic Coast Line has decided to construct a steel bridge across the Roanoke River, near this place. G. Gardner, Ch. Engr., Wilmington, N. C.

AUGUSTA, GA.—The South Carolina & Georgia R. R., the Charlotte, Columbia & Augusta, and the Florida Central & Peninsular R. R. have had a number of bridges destroyed by storms.

MACON, GA.—An iron bridge is to be constructed over the Ocmulgee River, on Fifth St. Address Mayor Price.

HAZLEHURST, MISS.—The county supervisors have voted to build at once two iron bridges over the Pearl River, one to be located at Rockport and one at Georgetown. The supervisors of Simpson county have appropriated $2,500 toward the Georgetown bridge.

CHILLICOTHE, O.—Bids are asked until Oct. 3 for a superstructure of two spans, 242 ft. long each, and for the repair of a 154-ft. span. A. W. Jones, County Engr.; H. S. Adams, County Audr.

COSHOCTON, O.—The county commissioners have decided to build a bridge across the Walhonding River, in Bethlehem township. A hearing will be given Sept. 26. Newton Speckman, County Audr.

DETROIT, MICH.—The board of public works has decided to construct overhead footwalks on the Belle Isle bridge, at an estimated cost of $15,000.

CHICAGO, ILL.—We are informed that a contract has been let to Roemheld & Gallery, at $10,000, for removing and placing three spans of the 61st St. viaduct, at three streets over the upper north branch of the Chicago River. A. G. Ritter, Cy. Bridge Engr.

EAU CLAIRE, WIS.—The city has voted in favor of issuing $40,000 in bonds for the construction of the new bridge over the Chippewa River, at Kelsey St.

DES MOINES, IA.—Alderman Hall is preparing plans for a brick and masonry bridge of five arches, over the Des Moines River, on North Bluff St. The work will be done by local labor, according to reports.

DULUTH, MINN.—The Duluth, Missabe & Northern Ry. Co. has awarded a contract to the Wisconsin Bridge & Iron Co., Milwaukee, Wis., for a bridge 400 ft. long, including approaches with a Warren truss span of 165 ft., over the Cloquet River. A steel bridge will be constructed over the Duluth incline road in West Duluth, to take the place of the present trestle. It will consist of two spans of 50 ft. each. The contract has not yet been let. C. H. Martz, Ch. Engr., Duluth.

WICHITA, KAN.—Reports state that a bridge is to be constructed across the Chickasaw River, near Pouca City.

OMAHA, NEB.—The question of repairing the L and Q St. viaducts, at a cost of about $3,000, is being considered by the railways, according to report. Address City Engineer Beal, or Chief Engineer King of the Stock Yards Co. ——The Stock Yards Co. has awarded C. E. H. Campbell, Council Bluffs, Ia., a contract to construct a viaduct 700 ft. long, having a capacity of 300 lbs. per sq. ft., at a cost of about $10,000.——The council has taken steps toward the construction of the new 16th St. viaduct, to be erected by the railway companies.

WATERLOO, NEB.—The county commissioners, Omaha, received the lowest bid from J. R. Sheeley & Co., Lincoln, at $2,800, for a 150-ft. steel bridge over the Elkhorn River.

ST. JOSEPH, MO.—The council committee has accepted plans for the new South 6th St. viaduct, which will be constructed by the city and the railroads; estimated cost, $32,500. J. R. Rackliffe, Cy. Engr.——The plans for the viaduct to be constructed by the Chicago Great Western Ry. Co. on Grand Ave., have been submitted to the council, the structure will be 600 ft. long, with a center span of 170 ft.; estimated cost, $15,000. H. Fernstrom, Ch. Engr., St. Paul, Minn.

DURANGO, COLO.—Bids are asked until Sept. 29 for a steel bridge over the Animas River, according to reports. George Weaver, County Clk.

WALLA WALLA, WASH.—Bids are asked until Sept. 19 for constructing a wooden or steel bridge across Mill Creek, at Fourth St. C. W. McLean, Cy. Clk.

LOS ANGELES, CAL.—Street Superintendent Finch has estimated that it will cost $1,200 to replank the Victoria Bridge, which is 600 × 30 ft.

STOCKTON, CAL.—Bids are asked by the county supervisors until Oct. 4 for building a steel bridge across Calaveras River on the Jack Tone Road. County Surv., Geo. A. Atherton, Stockton.

QUEBEC, QUE.—Press reports state as follows: At a meeting of the Quebec Bridge Co. Sept. 9, it was decided to at once call for bids for the construction of the bridge, which is estimated to cost from $3,000,000 to $4,000,000. The amount of capital so far subscribed is $286,000. The report states that the Dominion Government has given assurances that a subsidy of 33⅓% on the cost of the enterprise would be voted at the next session of Parliament. It is expected that the Province of Quebec and the city of Quebec between them will vote subsidies amounting together to another third of the cost, and the balance of the cost will be met by issuing bonds.

ROBSON, B. C.—On account of the death of Mr. Matthew, of Matthew & Keith, the contract for the bridge construction on the Robson-Penticton branch of the Columbia & Western Ry., has been reawarded to Porter Bros. and McArthur & Roberts.

BUILDINGS.

LIVERMORE FALLS, ME.—A fire in this town, Sept. 10, destroyed a large part of the business section, causing a reported loss of about $60,000.

BURLINGTON, VT.—Bids are asked by the school commissioners until Sept. 27 for the construction of a new high school building, as stated in our advertising columns. Supt., H. O. Wheeler; Arch., W. R. B. Wilcox, of Burlington.

BOSTON, MASS.—W. S. Sampson & Son, Boston, and G. A. Cahill, were the lowest bidders, Sept. 6, for erecting schools in South Boston and West Roxbury, at $36,600 and $29,515, respectively.

NEWPORT, R. I.—The Ocean House, on Bellevue Ave., was damaged by fire, Sept. 9, causing an estimated loss of about $90,000; insurance, $30,000. Owner, Henry H. Barbey, New York.

BROOKLYN, N. Y.—Bids are asked by the department of public buildings, lighting and supplies, at 346 Broadway, New York, until Sept. 20, for the work and material necessary to complete the alterations and entire furnishing of the room on the south side of hall, top story, of the City Hall, Borough of Brooklyn; also until Sept. 27, for materials and work required for certain repairs and alterations to the municipal building of the Borough of Brooklyn; Archs., Horgan & Slattery, 1 Madison Ave., New York.——Plans have been prepared, according to reports, for two 4-story brick and stone dwellings, at Carroll St. and Prospect Park West, to cost $48,000. Owner, S. Goodstein, 279 Bridge St., Brooklyn; Arch., Montrose W. Morris, 45 Exchange Place, New York.

DUNKIRK, N. Y.—Bids are asked by the council until Sept. 23 for erecting a new steel jail.

ITHACA, N. Y.—Col. Oliver H. Payne is reported to have made a gift of $1,500,000 to Cornell University in order to establish a new medical college.

LEROY, N. Y.—Bids are asked by the board of education until Sept. 21 for the purchase of $8,000 of school bonds. Clk., Harry H. Falkner.

NEW YORK, N. Y.—Plans are being prepared for a 5-story fireproof stone residence, 35 × 80 ft., to be erected on 79th St., between 5th and Madison Aves., to cost about $125,000. Arch., C. P. H. Gilbert, 1123 Broadway.——Plans are being revised, according to reports, for the new addition to be built for the Catholic Protectory at Van Nest, to cost about $30,000. Archs., Farnsworth & Miller, 111 Nassau St.——Plans have been filed by John Heller, 24 Greenwich Ave., for two 5-story brick flat buildings at 135th St. and Willis Ave., to cost $80,000. Arch., H. T. Howell, 748 East 138th St.; by Ed. C. Edwards, 952 Bergen St., for a 6-story brick warehouse at West Broadway and Prince St., to cost $70,000. Arch., Franklin Baylies, Bible House; by Leith & Glenn, for two 6-story brick flat buildings on 92d St., near the Boulevard, to cost $75,000. Archs, Neville & Bagge, 217 West 125th St.; by John McSweeney, 241 West 103d St., for three 5-story brick and stone flat and store buildings at 125th St. and the Boulevard, to cost $90,000. Archs., Jones & Deo, 967 Boulevard; by Ernest R. and Clarence J. Lawson, 898 West End Ave., for a 6-story brick flat building on 117th St., near Manhattan Ave., to cost $100,000. Arch., G. Fred. Pelham, 503 5th Ave.; by James Livingston, 8 West 91st St., for six 4-story brick dwellings on 103d St., near West End Ave., to cost $120,000, and by Jas. Kilpatrick for two 6-story brick flat buildings on 95th St., near Amsterdam Ave., to cost $120,000. Archs., Neville & Bagge, 217 West 125th St.; by Meyer Beyer, 748 East 138th St., for four 4-story brick flat buildings on 140th St., near St. Ann's Ave., to cost $72,000. Arch., Harry T. Howell; by Louis Pereistein, 96 Monroe St., for a 6-story brick flat and store building at Oak and Monroe Sts., to cost $50,000. Archs., Horenberger & Straub, 122 Bowery; by C. F. Miller, 35 Wall St., for a 6-story brick and stone office and studio building at 564 to 568 5th Ave., to cost $185,000. Arch., C. P. H. Gilbert; by F. W. Gill, 217 Kean St., Brooklyn, N. Y., for two 6-story brick flat buildings at 92d St. and Central Park West, to cost $155,000. Arch., G. W. Spitzer, 156 5th Ave.; by the Riverside Building Co., for six 6-story brick and stone dwellings, at 83d St. and Riverside Drive, to cost $150,000. Arch., C. W. True, 459 Boulevard; by Lorenz F. J. Welher, Jr., Owner and Arch., 125th St. and Park Ave., for four 5-story brick flat buildings at 150th St. and Brook Ave., to cost $110,000; by Herbert and Henry Jones, 110 Beekman St., for four 5-story brick flat buildings at Brook Ave. and 150th St., to cost $110,000. Arch., L. F. J. Welher, Jr.——E. F. Dodson & Co., 1123 Broadway, is reported to have been awarded the general contract for constructing a 7-story apartment building on Central Park West, near 94th St., for William Call, to cost about $100,000. Archs., J. E. Ware & Co., 487 5th Ave.

NORTH TARRYTOWN, N. Y.—An election will be held here Sept. 15 in order to decide whether it be advisable to build an addition to the school building, to cost about $20,000.

OGDENSBURG, N. Y.—Bids are asked until Sept. 22, according to reports, for the heating, ventilating and electric wiring of a building for the St. Lawrence State Hospital.

PORT JERVIS, N. Y.—Lorenzo Wood, Port Jervis, is stated to have been awarded the contract for erecting the new Church St. school building at $16,884.

TROY, N. Y.—The Union R. R. Co., of Troy, expects to make extensive alterations to its present station at Troy, including an entire new glass roof; the paving of Union St. with brick, new curbing, etc., and the taking out and replacing part of present tunnel between Congress and Ferry Sts., and strengthening the remainder with concrete. Estimated cost, $100,000. Secy., F. A. Harrington.

NEWARK, N. J.—Plans are about completed for a new school building to be erected at 7th Ave. and Factory St., at a present cost of $35,000. Archs., Ward & Davis, 203 Broadway, New York.

ORANGE, N. J.—Bids are asked until Sept. 28 for erecting the proposed addition to the Lincoln Ave. school building, to cost about $15,000.

TRENTON, N. J.—The Broad St. Bank has given the contract for the structural iron work of its new building on East State St. to the New Jersey Steel & Iron Co., at $20,795. Estimates have been received for the mason work for the foundation, but the contract has not yet been given.

BRADFORD, PA.—Bids are asked until Sept. 19 for the repairing of the Era hook and ladder building. Address Jas. A. Lindsey.

CHESTER, PA.—The contract for erecting the Crozer Home for Incurables is reported to have been awarded to a Chester firm, at $47,480.

PHILADELPHIA, PA.—It is reported that bids will soon be asked for erecting a 12-story apartment house at Broad and Spruce Sts., to cost $750,000. Archs., Dull & Peterson and Crawford Coates, 1107 Walnut St.——The following bids were received by the navy department Sept. 3 for

constructing a steel storehouse, 347 × 61 ft., at the League Island Navy Yard: Thos. M. Leeds, 1216 Race St., Philadelphia, $24,239; J. E. & A. L. Pennock, 305 Walnut St., Philadelphia, $21,487; H. L. Forte, Drexel Bldg., Philadelphia, $28,000; Macey, Henderson & Co., 1215 Filbert St., Philadelphia (accepted), $21,926; Chas. McCaul, 10 North 11th St., Philadelphia, $24,100; Penn Bridge Co., Beaver Falls, Pa., $27,000; Stacey B. Opdyke, Jr., Philadelphia, $28,278.

DENBIGH, VA.—The B. F. Smith Fireproof & Construction Co., of Washington, D. C., was awarded the contract for erecting the new jail building for Warwick county Sept. 6, to cost about $8,000.

ATLANTA, GA.—The county commissioners have decided to employ Grant Wilkins to draw plans for a new court house annex, to cost about $100,000.

MADISONVILLE, KY.—The Pauly Jail & Mfg. Co., St. Louis, Mo., is reported to have received the contract for erecting the proposed Hopkins county jail, at $6,998. Arch., W. C. Morton.

MOREHEAD, KY.—Clark & Howard, of Lexington, Ky., have been awarded the contract for erecting a new court house for Rowan county, at $14,000.

PORT CLINTON, O.—It is reported that plans have been prepared for a new court house for Ottawa county, to cost about $100,000. Archs., Wing & Mahurin, Pixley Block, Fort Wayne, Ind.

WASHINGTON, O.—The Masonic Temple in this town was burned Sept. 11, causing an estimated loss on the building of $40,000.

IRONWOOD, MICH.—Plans have been prepared for a 3-story brick and stone school building, to cost $25,000. Archs., Charlton, Gilbert & Demar, Milwaukee, Wis.

CHARLESTON, ILL.—Bids are asked by the supervisors of Cole county until Sept. 20 for the repairing of the court house. J. K. Rardin, Chn. Bldg. Com.; C. W. Rapp, Arch., 100 Washington St., Chicago, Ill.

CHICAGO, ILL.—The Peavey Grain Co. is said to contemplate the erection of an additional elevator at South Chicago, to cost $100,000.

OSCEOLA, WIS.—Bids are asked until Sept. 22 for the erection of a school building; deposit, $150. Address C. W. Staples, Clk. of School Bd.; Orff & Gilbert, Archs., Minneapolis, Minn.

SHEBOYGAN, WIS.—Bids are asked until about Sept. 30 for erecting a brick and stone school building, 75 × 100 ft., at a cost of about $23,000. Arch., Charles Hilpertshauser.

WAUSAU, WIS.—Reports state that the Northwestern Ry. Co. will make improvements at this place to cost $50,000, including a freight and a passenger station.

DES MOINES, IA.—Reports state that Proudfoot & Bird have prepared plans for a 7-story brick building, to be erected at 5th and Locust Sts., in the spring, by Conrad Youngerman; estimated cost, $100,000.

ST. JAMES, MINN.—The Mankato Plumbing & Heating Co. has been awarded the contract for a steam heating system for the Armstrong Hotel, at $2,625. Arch., F. Thayer, Mankato, Minn.

SOUTH OMAHA, NEB.—The following bids were received by the supervising architect, Washington, D. C., Sept. 7, for a low pressure steam heating and ventilating apparatus for the post-office building at South Omaha:

		Time.
Pittsburg Heating Supply Co., Pittsburg	$4,100 80	days.
Chafer & Becker, Cleveland, O	5,670 80	"
Korsmeyer Plumbg. & Htg. Co., Lincoln	3,595 80	"
John Rowe & Co., Omaha, Neb	4,724 ..	....
Dare & Manning, Omaha, Neb	5,642 80	days.
Chas. D. Symms, Lemars, Ia	4,444 70	"

TWIN BRIDGES, MONT.—It is reported that D. A. Pease, of this city, expects to erect a hotel building here to cost $50,000.

JEROME, ARIZ.—This town was almost entirely destroyed by fire Sept. 11, causing a loss estimated at $1,000,000.

CHEMAWA, ORE.—Pugh & Gray were the lowest bidders for the construction of the proposed school building for the Harrison Training School, at $18,000.

SAN FRANCISCO, CAL.—Bids are asked by the bureau of medicine and surgery, navy department, until Oct. 12, for erecting a new naval hospital at the U. S. Navy Yard, Mare Island. W. K. Van Reyper, Surgeon-General, U. S. N., Washington, D. C.

SITKA, ALASKA.—Bids will be received by John G. Brady, Governor of Alaska, at Sitka, until Oct. 1, for the construction of a school building and teacher's residence at Wood's Island, in St. Paul Harbor, to cost about $2,200.

NEW WESTMINSTER, B. C.—A fire in this city Sept. 11 destroyed most of the business portion of the city. Estimated loss, $2,000,000; insurance, about $1,250,000.

WATER-WORKS.

DANFORTH, ME.—The town clerk writes us that the question of putting in works, which was discussed early in the season, has been dropped.

HALLOWELL, ME.—Local papers state that the commissioners will build a 3,000,000-gallon reservoir near the City Farm pumping station. The reservoir will be 240 × 390 ft.

ESSEX JUNCTION, VT.—G. A. Brownell, Chn. Com., writes us that the committee is investigating the best means of furnishing a water supply to the town. The works will not be built this season. T. W. Sibley is also on the committee.

MONTPELIER, VT.—The Barre & Montpelier Power & Traction Co., it is stated, has decided to install a pumping plant for its car barn and property here.

WEST SPRINGFIELD, MASS.—N. T. Smith, Chn. Comrs., writes us that nothing has yet been done with regard to the proposed improvements to the works. A special town meeting will soon be held to consider the question. The water board will report plans for an additional reservoir and some other changes to the works. Population, 6,700.

HARRISVILLE, N. Y.—Bids are asked until Sept. 28 for furnishing the materials and for building the proposed works recently voted for. Chn. Comrs., F. W. Werner.

NEWARK, N. Y.—The plant of the Newark Water-Works Co. has been sold to the bondholders of the company.

NIAGARA FALLS, N. Y.—The question of extending the city mains to the Niagara University is being considered by the council. It will require a larger pumping capacity to furnish water to the university. Mayor Hastings may be addressed.

RHINEBECK, N. Y.—Jos. M. Johnson, of Millersburg, Pa., has been granted a franchise for works and also a contract for furnishing the town with water. The construction will probably be begun at once.

JERSEY CITY, N. J.—Garwood Ferris has submitted a report in favor of plan No. 1 submitted by Pat'k H. Flynn, Brooklyn, N. Y., for furnishing this city with a water supply. This plan has for its source of supply the Rockaway River at Old Boonton, and is to provide a gravity supply of 70,000,000 gallons a day. The cost will be $8,745,000. It is stated that Mayor Hoos is opposed to the plan. A final conference will be held Sept. 26.——The street and water board will ask for bids at once for furnishing three meters to be placed at Belleville, Kearney and Harrison.

BENNETT, PA.—We are informed that the water supply for this place will be furnished by the Millvale Water-Works by the erection of an additional pump. The question will be voted upon Nov. 8. Address W. A. Young.

BLUERIDGE SUMMIT, PA.—D. G. Adelsberger, Civil Engr., 722 Pennsylvania Ave., Baltimore, Md., is reported to have submitted a plan for new works for this place.

BRADFORD, PA.—The Hazlehurst Water Co. was incorporated Sept. 12 to furnish water to Hazlehurst; capital stock, $12,000, with $1,200 paid in; incorporators, Edwin E. Tait, Treas., Bradford, Pa.; P. C. Blaisdell, Bradford.

CHAMBERSBURG, PA.—The council has voted to purchase a 2,000,000-gallon pump from the Stilwell-Bierce & Smith-Vaile Co., Dayton, O., for $1,950.

CHARLEROI, PA.—The Charleroi Water Co. has let the contract for furnishing two 2,500,000-gallon pumping engines to the Wilson-Snyder Mfg. Co., Pittsburg.

GALLITZIN, PA.—Jas. L. Mitchell, Tyrone, Pa., is reported to have purchased the works in this town. He will improve the plant at once. Population (1890), 2,392.

LANCASTER, PA.—Simon Shissler, Mayor, writes us that Allen Hazen, 220 Broadway, New York, has been engaged to advise the city of the best method of securing a purer water supply. After receiving the report, if favorable, the committee will ask for a loan in the spring to carry out Mr. Hazen's recommendations.

McKEE'S ROCKS, PA.—The question of building municipal works is being considered, according to reports. At present a supply is secured from the works of the Monongahela Water Co., Pittsburg.

STRASBURG, PA.—bids are asked until Sept. 20 for the purchase of $20,000 of 4% water bonds. The council in August accepted a proposition from the Strasburg Water Co. to furnish complete works for $19,000. Burgess, B. F. Book.

YORK, PA.—Local papers state that the board of health is desirous of having another water company to furnish the city with an additional water supply, which is to be filtered. President Hay, of the board, and Mayor Brant may be addressed.

MARTINSBURG, W. VA.—The council is reported as arranging for the immediate construction of the proposed improvements to the works. They will include a new 2,500,000-gallon pump, an increased water supply, etc. Supt., J. M. Shaffer.

DENTON, MD.—The question of building works is being considered, according to reports.

MADISON, GA.—The mayor writes us that no steps have been taken by the city toward building the works under discussion some months ago.

SYLVANIA, GA.—An election will be held Sept. 27 to vote on the question of issuing bonds for an artesian well and a water supply, noted in our issue last week.

MOBILE, ALA.—The following submitted bids Sept. 1 to J. C. Bush, Mayor, for constructing the proposed municipal works, as advertised in Engineering News: W. D. Boyce & Co., St. Louis, Mo.; Addyston Pipe & Steel Co., Cincinnati, O.; Holly Mfg. Co., Lockport, N. Y.; C. H. Pelee Co., Boston, Mass., complete, $538,000; Alabama Construction Co., Anniston; Pleuger & Henger Mfg. Co., St. Louis, Mo.; Healy & McLean, Chicago; Chapman Valve Mfg. Co., Boston; Michigan Brass & Iron Works, Detroit; J. P. Neely, Chattanooga; Glamorgan Pipe & Foundry Co., Lynchburg, Va.; American Pipe & Foundry Co., Chattanooga; Henry R. Worthington, New York; M. T. Lewman & Co., Louisville, Ky., and J. N. Hazlehurst, Atlanta, bidding together, $531,984; Guild & Co., Chattanooga, Tenn., $533,609; Ludlow Valve Mfg. Co., Troy, N. Y. Supervising Engr., T. W. Nicol, Mobile.

CLARKSDALE, MISS.—The Clarksdale Water & Light Co. was incorporated Sept. 3 with a capital stock of $35,000, by Walter Clark, E. L. Anderson and W. P. Holland.

McCOMB CITY, MISS.—Bids are asked until Sept. 21 for constructing works to cost about $40,000. Engrs., Sanders & Porter, Columbia Bldg., Louisville, Ky.; Mayor, C. C. Jarvis.

WINONA, MISS.—The Winona Ice, Electric Light & Water Co. has been incorporated with a capital stock of $100,000, by E. R. Blackston, D. B. Turner and others. The works will probably not be built until after the electric plant is completed.

NEW IBERIA, LA.—A. J. Cammack, Secy. and Attorney, writes us that an election was called for Oct. 17 to vote on the question of building works and a light plant, but it is likely to be set for a later date on account of irregularities in getting signatures to the petition; population, 7,000.

GALLATIN, TENN.—An election will be held Sept. 24 to again vote on the question of building works; estimated cost, $25,000. Mayor, W. L. Oldham.

LOUISVILLE, KY.—Fred. Hoertz, Louisville, has been awarded the contract at $297,390 by the Louisville Water Co. for furnishing the materials and for building the proposed filter plant. The plant is to be completed by Dec. 31, 1899. Pres., Chas. R. Long.

ELYRIA, O.—P. H. Boynton, water-works trustee, writes us that construction on the new works has been stopped for the present on account of an injunction.

FORT RECOVERY, O.—J. D. S. Neeley, Lima, O., is interested in the proposed works for this place.

MARIETTA, O.—Bids are asked until Sept. 26 for furnishing a 3,000,000-gallon pumping engine for the water-works. (Postponement from Aug. 29.) Supt., J. B. West; Pres. Water Comrs., J. H. McConnell.

NEW RICHMOND, O.—We are informed that an election to vote on the question of building works was called for Sept. 12. The water supply will be secured from the Ohio River. A filtration plant will be put in; estimated cost, including electric plant, $30,000. Engr., E. F. Layman, 32 East 3d St., Cincinnati.

BLOOMINGTON, IND.—H. F. Perry, Pres. City Water-Works Co., recently incorporated, writes us that the plant has been in operation several years. Some changes will probably be made by the new company, but no steps have yet been taken in that direction.

CONNERSVILLE, IND.—This place voted Sept. 3 to keep the works in the present location. It is proposed to make a number of improvements to the works.

HENRYVILLE, IND.—The question of building works is being considered, according to reports.

LAKE ODESSA, MICH.—It is stated that this place has voted to issue $10,000 in bonds for the proposed works. Village Pres., Wm. H. McCartney.

EATON RAPIDS, MICH.—This place voted last week to build works to cost about $25,000; population, 2,500. Engrs., Alvord & Shields, The Rookery, Chicago; Secy. Water Bd., Jos. H. Gallery.

GRAND RAPIDS, MICH.—Fire Marshal Lemoine has recommended that the city build two new stand-pipes.——The water-works trustees are considering the question of purchasing another pump for the works.

CHICAGO, ILL.—W. B. Wickersham, Secy. Chicago Public Library, writes us that Thomas & Smith, 16 North Canal St., Chicago, submitted the only bid Sept. 7, at $5,370, for furnishing four pressure water storage tanks. Mr. Wickersham says that the reason given by some contractors for not bidding was that they would not be bound by the clause in the specifications requiring union labor.

KENNEY, ILL.—H. C. Suttle and Andy Hawkyard are interested in the proposed works for this place.

MOLINE, ILL.—Jacob A. Harmon, 21 Arcade Bldg., Peoria, Ill., prepared preliminary plans, estimates and report on a water supply improvement for this city, and submitted same to the council Sept. 8. The plans contemplate the construction of natural or slow sand filters having a capacity of 3,000,000 gallons per 24 hours, a distribution reservoir of 5,000,000 gallons, two settling basins of 2,800,000 gallons each, a water tower and tank, which has a capacity of 185,000 gallons, a pumping station and about $15,000 or $20,000 worth of mains. It is expected that detail plans and specifications will be ready in January.

BARABOO, WIS.—Press reports state that the council has ordered the Baraboo City Water-Works Co. to furnish a larger water supply.

SPRING VALLEY, WIS.—The council, it is stated, will soon issue $2,600 in bonds for works for fire protection.

SEYMOUR, IA.—The question of building works and a light plant is being considered, according to reports.

LITTLE FALLS, MINN.—An election will be held Oct. 4 to vote on the question of issuing $60,000 in bonds for municipal works and a light plant.

PERHAM, MINN.—C. F. Loweth, 94 East 4th St., St. Paul, has prepared plans for small works and a light plant. A steel tower 80 ft. high will be built.

WINONA, MINN.—Local papers state that the question of putting in a pumping plant at the artesian well is being considered; estimated cost, $13,000.

TOPEKA, KAN.—It is stated that Mayor Fellows has called an election to vote on the question of either purchasing the works of the Topeka Water Co. or of building new works. For either plant $440,000 will be issued.

LITTLE ROCK, ARK.—The council fire committee has been directed to investigate the alleged low pressure of the water supply furnished by the Home Water Co. Mayor Woodson and Councilman Reid may be addressed.

COLORADO, TEX.—Robt. M. Webb, Secy. and Treas. Colorado Water-Works Co., recently incorporated, as noted in last week's issue, writes us that the company will do no new work, the plant having already been built; it was only purchased from the owners and a new company organized.

DARLINGTON, OKLA.—Bids are asked until Sept. 19 for furnishing the materials and for building the proposed works and sewers for the school on the Cheyenne and Arapahoe agency. Maj. A. E. Woodson, Acting U. S. Indian Agent, Darlington, or the Indian office, Washington, D. C., may be addressed.

SHAWNEE, OKLA.—Benj. Diesker, Cy. Clk., writes us that this place voted Sept. 2 to issue bonds for works. The supply will be secured from the river about one-fourth mile distant. The plant is not to cost more than $35,000. No contract has been let, nor are the bonds ready for sale. Population, 6,000. Engr., John M. Walker, Independence, Kan.

WAGONER, IND. TER.—J. S. Thatcher, 504 Cockrell Bldg., Dallas, Tex., has completed plans and specifications for the proposed works for this place. The works will consist of a compound duplex steam pump of 1,000,000 gallons capacity, about 10 miles of 4 to 10-in. cast-iron water pipe, 16 × 100 ft. stand pipe, etc. Bids will be received by the city clerk until about Oct. 1.

BRECKENRIDGE, COLO.—Bids were asked until Sept. 13 for furnishing the materials and for building works. The plant is to be completed in 60 days from date of contract. Town Clk., Jas. K. Darnell.

CHEYENNE WELLS, COLO.—The question of securing a water supply is being considered, according to reports.

GOLDFIELD, COLO.—A. W. Grant, Cy. Clk., writes us that the contract for building the proposed works was let Sept. 3 to local contractors. The issue of $25,000 of bonds has been sold. A report states that Sam'l Cummings has the contract.

WARD, COLO.—It is stated that the election called for Aug. 9 to vote on the question of issuing $12,000 in 6% bonds has been postponed to Sept. 27. Engr., D. J. McCanne, 1600 17th St., Denver, Colo.

CENTRALIA, WASH.—It is stated that the works of the Centralia Water Co. will be improved. Pres., W. C. Sharpstien.

FAIRHAVEN, WASH.—It is reported that the Fairhaven City Water & Power Co. has asked for bids for the construction of a 20-in. main from Lake Padden to the city. At present a 14-in. pipe is supplying the city with water.

McMINNVILLE, ORE.—Press reports state that the town is considering the question of securing an increased water supply from the mountains.

THE DALLES, ORE.—The commissioners have been authorized by the council to engage J. B. Golt, The Dalles, to prepare plans, specifications, etc., for extending the works, putting in larger pipes, and for securing a better water supply. S. Polton and M. Randall are on the committee.

COLTON, CAL.—Bids are asked until Sept. 20 for the purchase of 6% water-works bonds. Clk., G. E. Slaughter.

GLENDORA, CAL.—The Glendora-Azusa Water Co. has been incorporated with a capital stock of $50,000, of which $5,100 is paid in; incorporators, D. A. Cole, J. H. Odell, F. O. Kennard, Glendora; and A. P. Griffith, W. R. Powell, W. C. Ormiston and G. C. Matthews, Azusa.

LOS ANGELES, CAL.—Press reports state that on Sept. 11 Judge Oscar appointed Frank A. Gibson, cashier of the First National Bank, to be receiver of the Los Angeles City Water Co., pending the decision of the litigation now under way between the company and the city.

RED BLUFF, CAL.—It is stated that the construction of municipal works, at a cost of about $50,000, is proposed. Town Clk., J. F. Teass.

WHITTIER, CAL.—The board of trustees, it is stated, will soon ask for bids for the purchase of $40,000 of 20-year bonds, for the proposed municipal works.

GRANTSVILLE, UTAH.—A. F. Doremus, Salt Lake City, is reported to have been awarded the contract for building works at about $19,000.

SALT LAKE CITY, UTAH.—The question of securing an increased water supply is being considered. Mayor, John Clark.

IDAHO FALLS, IDAHO.—George Chapin, Chn. Bd. Trustees, writes us that it will be three weeks from Sept. 3 before any steps can be taken for the proposed works, as the city has to wait until the bids for purchasing the bonds are received. The law compels one month's advertising. Population, 1,400.

OTTAWA, ONT.—Robert Surtees, Cy. Engr., has been directed to prepare a statement of cost of a 20,000,000-gallon reservoir and stand-pipes of the same capacity. Mr. Surtees is stated by local papers to have recommended the installation of an extra pump of 10,000,000-gallons as an auxiliary.

STRATHROY, ONT.—Press reports state that this place is considering the question of building works and a sewerage system.

WATERLOO, ONT.—The owners of the works offer to sell the property to the city for $25,000. A board of trade committee, consisting of S. Snyder, Pres. Bd.; Messrs. Fischer, Moore, J. Conrad and Diebel, has been appointed to consider the question in conjunction with the council.

MEXICO, MEX.—The department of communication is making borings near Ajusco for an increased water supply. At first the supply will be for flushing the sewers, according to reports.

HALIFAX, ENGLAND.—The water committee has decided to recommend to the council to proceed with the Walsham Dean reservoir extensions, to cost about $1,000,000.

SEWERAGE

FRANKLIN, N. H.—The council has voted to build an outlet sewer in a certain street. Mayor Adams may be addressed.

AMHERST, MASS.—At the town meeting to be held Sept. 17 the question of building sewers in three streets will be considered. Chn. Selectmen, Wm. E. Smith.

BOSTON, MASS.—Wm. M. Brown, Jr., Ch. Engr. and Supt. Metropolitan Sewerage Comn., 3 Mount Vernon St., Boston, writes us that the following bids were received Sept. 3 for building additions to the pumping stations of the system, as advertised in Engineering News: Deer Island Station—Edward P. Allis Co., Milwaukee, $27,200, duty guaranteed, 80 million; Geo. F. Blake Mfg. Co., New York, $22,200, duty guaranteed, 75 million; Holly Mfg. Co., Lockport, N. Y., $20,785, duty guaranteed, 75 million; East Boston Station—Allis Co., $2,600; Blake Mfg. Co., $22,200; Holly Mfg. Co., $20,785, duty guaranteed, respectively, as for Deer Island; Charlestown Station—Allis Co., $25,800, duty guaranteed, 75 million; Blake Mfg. Co., $22,200, duty guaranteed, 70 million; Holly Mfg. Co., $20,785, duty guaranteed, 70 million; Alewife Brook, North Somerville Station—Burhorn & Granger, New York, $7,800, duty guaranteed, 50 million; Blake Mfg. Co., $7,500, duty guaranteed, 50 million; P. H. & F. M. Roots Co., 109 Liberty St., New York, $6,745, duty guaranteed, 68 million; Prindle Pump Co., 120 Liberty St., New York, $5,980, duty guaranteed 50 million. The additions for which bids were asked for the North Somerville Station includes a vertical compound condensing engine directly connected with a vertical centrifugal pump; a vertical tubular boiler of the Manning type, and necessary connections. Conditions of maximum capacity: Quantity pumped, 20 cu. ft. per sec. Lift, 13 ft.

HOLYOKE, MASS.—John J. Fitzpatrick, Cy. Engr., writes us that the plans for the Highlands sewers are being prepared. The length will be about 9¼ miles. The money has not yet been appropriated.

OLNEYVILLE, R. I.—It is proposed to construct sewers in certain streets.

WESTERLY, R. I.—I. B. Crandall, Pres. Town Council, writes us that a few years ago an approximate cost, with general plans for a system, was made. It is not thought that anything will be done towards securing the system for some years.

AMSTERDAM, N. Y.—Bids are asked until Sept. 30 for constructing storm sewers in certain streets. Secy. Comrs., Geo. McClumpha.

BALLSTON SPA, N. Y.—D. W. Maher, Pres., writes us that plans and specifications for a sewer in Gordon Creek for the extension of the same have been prepared by Harvey M. Gear. An appropriation for this work has been voted by the taxpayers; estimated cost, $4,000.

BUFFALO, N. Y.—The aldermen received the following bids Sept. 6 for constructing a 5-ft. 3-in., 5-ft. 4-in., 5-ft., 4-ft. 9-in., 4-ft. 6-in., 4-ft. 3-in., 4-ft., 3-ft. 9-in. and 3-ft. 6-in. brick sewer in Hampshire St. and Ferry St., from Albany St. to Elmwood Ave.: John Harrer, $34,800; Wm. Franklin, Jr., $34,900; Ritzmann & Miller, $37,900; W. A. Rappich, $38,376; Henry Harter, $38,985; Christ Smith, $45,595.

COHOES, N. Y.—Edward Hayes, Cy. Engr., writes that the statement in our issue of Sept. 1 that "plans for a system marked IXL, prepared by Hunter & Fernald, Melrose, Mass., have been adopted by the commission," is not correct. They received the prize for the best plan submitted. The plan adopted was made by Mr. Hayes, and is similar to the old plan made about a year ago with Rudolph Hering, 100 William St., New York, as consulting engineer.

LANSINGBURG, N. Y.—It is proposed to build a sewer in an alley between 24th and 25th Sts., at a cost of $2,004.

LITTLE FALLS, N. Y.—The council has voted to enlarge certain sewers at a cost of about $8,386, according to reports. City Engineer Babcock and Mayor Dasey may be addressed.

NEWBURG, N. Y.—The board of public works has recommended to the council the construction of a new sewer in Third St., to cost about $26,647.

SYRACUSE, N. Y.—The city engineer has recommended the construction of a 56 × 84 to 34 × 51-in. brick sewer in West Colvin St. to cost about $26,000, and a 24-in. brick sewer to cost $8,200.

TROY, N. Y.—Bids are asked until Sept. 20 for constructing pipe sewers in three streets. Secy. Contracting Bd., E. Ogden Ross.

JERSEY CITY, N. J.—Bids are asked until Sept. 19 for constructing about 6,000 ft. of 60 to 36-in. brick sewer, etc. Clk. Bd St. and Water Comrs., Geo. T. Bouton.

WILDWOOD, N. J.—Bids are asked until Sept. 21 for repairing and completing the construction of the sewerage system. Clk., Jed Du Bois.

WOODBRIDGE, N. J.—It is stated that an election will be held Sept. 28 to vote on the question of building a system.

BRADDOCK, PA.—The council has been petitioned to build a sewer in Holket Ave. Supt. Pub. Wks., Wm. Howat.

CRAFTON, PA.—Bids are asked until Sept. 20 for constructing 5,140 ft. of 30 to 8-in. pipe sewers. Engr., F. A. McDonald, 813 Penn Bldg., Pittsburg; Clk., R. H. Thomson.

WAYNESBURG, PA.—This place voted Sept. 6 against issuing $19,000 in bonds for constructing a system.

GAINESVILLE, PA.—G. P. Boone, Cy. Clk., writes us that a system for this city has been talked of, but it is not likely that anything will be done this year towards building it.

RANKIN, PA.—The council is reported to have decided to build sewers and pave certain streets notwithstanding that the proposition to issue $25,000 in bonds for the work failed to carry at the recent election.

ORANGEBURG, S. C.—This place is reported to have decided not to build a system at present.

SAVANNAH, GA.—It is stated that the following bids were received by the committee Sept. 1 for building a mile of brick and about 49 miles of pipe sewers for the proposed house drainage system, as advertised in Engineering News: Lauer, Hageman, Brayer & Albaugh, Rochester, N. Y., $269,828; Cranford & Co., Brooklyn, N. Y., $153,495; Greenville Construction Co., $177,021; James F. McCabe, Baltimore, Md., $206,221; Herbert Tate, New York, about $170,000; Miles & Bradt, Atlanta, Ga. (received by mail after opening of bids), about $151,000. Cy. Engr., W. J. Winn.

NASHVILLE, TENN.—The residents of the 10th ward have petitioned the board of public works to build an extension to the Lick Branch sewer at a cost of about $30,000.

COLUMBUS, O.—Director of Public Works Jacobs has suggested that a number of sewers be built at a cost of about $150,000.

MARIETTA, O.—The council has passed an ordinance to build a storm sewer in the Fifth district. Cy. Clk., Carl Becker.

MIDDLETOWN, IND.—It is proposed to construct a sewer in 9th St. Clk., W. L. Campbell.

DELRAY, MICH.—Bids are reported to have been asked by the town clerk for building 9,000 ft. of sewers. The outlet will be into the Rouge River.

WYANDOTTE, MICH.—G. B. Palmer, Engr., Michigan Alkali Co., is reported to have prepared estimates for a system to cost about $53,000.

BLOOMINGTON, ILL.—It is proposed to build the Valley sewer at once.

MILWAUKEE, WIS.—Bids are asked until 10.30 a. m., Sept. 16, for constructing Section No. 6 of the 30th St. sewer tunnel; check, $11,250. The bids for this work received Sept. 8 were considered too high, they ranging from $26 to $32.70 a ft.; total, $78,000. Chn. Bd. Pub. Wks., Geo. H. Benzenberg.

RACINE, WIS.—P. B. Johnson has been awarded the contract for building the sewer extension in 16th St. at $11,641.

DECORAH, IA.—It is proposed to build a system, according to reports. Cy. Clk., E. Mather.

ST. PAUL, MINN.—Bids are asked until Sept. 15 for constructing a sewer in Charles St. Clk. Bd. Pub. Wks., C. H. Bronson.

COLUMBUS, NEB.—Bids are reported as being asked by the West End Sewer Co. for building two miles of pipe sewer at a cost of $5,000.

SCHUYLER, NEB.—Bids are asked until Sept. 20 for furnishing six cars of 25 to 18-in. pipe sewer, according to reports. Clk., N. H. Mapes.

GRAND FORKS, N. DAK.—The aldermen have voted to ask for bids for constructing sewers in certain streets.

BROOKFIELD, MO.—This place, it is stated, will vote at once on the question of issuing $14,000 in bonds for a system.

SEATTLE, WASH.—T. Ryan and J. W. Fitts have been awarded the contracts for building sewers in Dearborn St. and Taylor Ave. at $2,666 and $1,261, respectively.

OAKLAND, CAL.—It is proposed to build sewers in 24th St. at a cost of $8,500, an outlet sewer for the east side, at a cost of about $30,000 and a sewer in the vicinity of Telegraph Ave. and 49th St.

MONTREAL, QUE.—The road committee has decided to recommend to the aldermen the construction of sewers and a sewage disposal farm for St. Denis, to cost about $75,000. Aldermen Brunet and Turner may be addressed.

OTTAWA, ONT.—This city voted Sept. 8 in favor of the main drainage by-law, which authorizes the council to spend $425,000 for a trunk sewer. Chn. Com., Alderman Samuel J. Davis; Consult. Engr., Rudolph Hering, 100 William St., New York.

STRATHROY, ONT.—The question of building a system and water-works is being considered, according to reports.

GARBAGE DISPOSAL—STREET CLEANING

BOSTON, MASS.—Press reports state as follows: Street Superintendent Wells signed a contract Sept. 10 with Herbert Tate, Pres., and Mr. Gooch, Counsel, of the City Refuse Utilization Co. of New York, at $5,500 a year, for the disposal of the refuse in the city. The contract is for 10 years, the city reserving the right to purchase the plant at the end of the first five years. The material will be handled in a building to be erected at Fort Hill Wharf. Work on the plant will begin next week, completing it in time for the plant to be in operation Dec. 1.

ALBANY, N. Y.—The board of contract has given the contract for removing the street dirt, awarded to Jos. S. Droogan last March, to John C. Wasserbach.

BUFFALO, N. Y.—Henry P. Burgard has been awarded the 5-year contract for street cleaning, beginning Sept. 15; bond, $50,000.

UTICA, N. Y.—The council has let the contract for collecting the garbage to Emmett J. Hurley, at $6,445.

READING, PA.—Bids are asked until 4 p. m., Sept. 16, for reconstructing or enlarging the crematory to a capacity for destroying 80 tons of unstrained garbage a day; surety, $3,000. Cy. Engr., S. S. Hoff.

UNIONTOWN, PA.—The borough council is reported as considering the question of purchasing a garbage disposal plant.

WEST CHESTER, PA.—A. M. Eachus, St. Comr., is reported as urging the city to purchase additional street sprinklers, etc.

LOUISVILLE, KY.—The board of public works is considering the question of building a crematory to cost about $10,000.

EVANSVILLE, IND.—Frank Pritchett has been awarded the contract for sweeping the streets for one year from Sept. 15 at 18 cts. for 10,000 sq. ft.; total, $5,000.

MARION, IND.—The council and the board of health are considering plans for rebuilding the burned garbage disposal plants.

SOUTH BEND, IND.—L. A. Hull, Cy. Clk., writes us that action is not likely to be taken this season toward securing a garbage disposal plant. The question is only being agitated. Cy. Engr., W. H. Rosencrans.

GALVESTON, TEX.—Dr. W. C. Fisher, Cy. Health Officer, has stated that the city should have two garbage disposal plants.

DENVER, COLO.—The question of a better method of garbage disposal is being considered, according to local papers. Dr. Munn and Superintendent Clerk, of the board of health, may be addressed.

SPOKANE, WASH.—W. M. Potter, Health Officer, writes us that nothing has yet been done in regard to a garbage disposal plant.

STREETS AND ROADS.

PITTSFIELD, MASS.—The highway commissioners, Boston, have awarded a contract to Harris & [illegible]ony, Boston, at $6,787, for constructing a section of [illegible] roads.

WESTMINSTER, MASS.—C. H. Kelliher, [illegible]sburyport, Mass., has been awarded a $3,963 contract [illegible]building a state road in this place.

BRIDGEPORT, CONN.—Bids are asked until [illegible]. 16 for macadamizing on East Main St., according [illegible]ports. F. C. Mullins, Clk. Com.

NORWALK, CONN.—Reports state that the question of constructing about 7,000 sq. yds. of brick pavement on concrete, is being considered. Chas. N. Wood, Cy. Engr.

SHELTON, CONN.—Bids are asked until S[illegible]m., Sept. 16, for grading a section of Canal St. Engr. [illegible]S. Brinsmade, Derby, Conn.; C. V. Case, Borough Clk.

ALBANY, N. Y.—Bids are asked until Sept. [illegible] for improving the White's Corners Plank Road, between Buffalo and Hamburg. J. L. Little, Division Engr., Powers Block, Rochester; Geo. C. Diehl, County Engr., Buffalo; C. W. Adams, State Engr., Albany.——Plans are being prepared by the clerk of the board of contract, for paving Hamilton St. from Quail St. west. A contract has been awarded to Mulderry Bros., at $82,079, for the brick paving [illegible] Elm St.

BUFFALO, N. Y.—The board of public works has awarded a contract to the Barber Asphalt Paving Co., at $33,097, for surfacing Niagara St., from Niagara Square to Porter Ave.

LONG ISLAND CITY, N. Y.—Bids are asked until Sept. 20 for laying asphalt bicycle strips on Fulton Ave. and five other streets. J. P. Keating, Comr. Highways, 150 Nassau St., New York.

NEW YORK, N. Y.—Bids are asked until 11 a. m. Sept. 15 for taking up and relaying pavement now in Park Ave., from 126th St.; also for paving with asphalt pavement the roadway of 19th St., from Eighth to Ninth Aves., etc. J. P. Keating, Comr. Highways, 150 Nassau St.

NIAGARA FALLS, N. Y.—Bids are asked by the board of public works until Sept. 23 for asphalt paving on Cherry St. Walter Jones, Cy. Engr.

PORTCHESTER, N. Y.—The trustees are considering the bid of Erbeck Bros., Homestead, Pa., at $44,533, which was the lowest for paving in Main St.

ROCKTON, N. Y.—Bids are asked until 4.30 p. m., Sept. 17, for grading and macadamizing about 1½ miles of road. F. C. Crane, Cy. Engr., Amsterdam.

SCHENECTADY, N. Y.—Bids are asked by the council until Sept. 20 for grading, flagging, etc., in North St., and paving Hamilton St., from Veeder Ave. to Hulett St.—The question of paving Clinton and Union Sts. will be considered by the aldermen at the October meeting.

SYRACUSE, N. Y.—Bids are asked until Sept. 19 for furnishing the material and for grading plank sidewalks and asphalt paving on certain streets. M. Z. Haven, Cy. Clk.

JERSEY CITY, N. J.—Bids are asked until Sept. 19 for about 1,350 cu. yds. of sand filling, 7,000 sq. ft. of flagging, 6,250 sq. yds. of Belgian paving, etc., on Charles St. Geo. T. Bouton, Clk. Bd. St. Comrs.

PERTH AMBOY, N. J.—A petition has been presented to the board of aldermen for the extension of Wayne St. to Easton St.

WEST HOBOKEN, N. J.—The council has awarded the Barber Asphalt Co. a contract, at $59,552, for paving Clinton Ave.

ALLEGHENY, PA.—New bids are asked for regrading and paving Pennsylvania Ave., from Allegheny Ave. to Beaver Ave. Robt. McAfee, Dir. Pub. Wks.

MAUCH CHUNK, PA.—The council has decided to spend $40,000 in street improvements. The question of increasing the bonded indebtedness to that amount will be voted on at the November election.

NEW KENSINGTON, PA.—It has been voted to issue $45,000 in bonds for street paving, and $15,000 in bonds for sewers, etc.

NORTH WASHINGTON, PA.—Reports state that the council will issue $10,000 in paving bonds.

PATTON, PA.—Bids are asked until Sept. 19 for brick paving, grading, etc., of Magee Ave. E. C. Brown, Borough Engr.

SHAMOKIN, PA.—Ward & Stucker, Harrisburg, Pa., have been awarded a contract to pave Independence St. with Mack brick, which will require about 521,000 brick, at an estimated cost of $20,000.

CUMBERLAND, MD.—Conda Wilson, Chn. St. Com. and J. W. Cook, County Comr., have decided to use the county's appropriation of $2,000 for paving a street west of Mill St.

WILLIAMSPORT, MD.—Reports state that the Cumberland Valley R. R. Co. will macadamize the road to Downsville, a distance of four miles. Address Mayor Thompson.

NEW ORLEANS, LA.—We are informed that the council has rejected all the bids for asphalt paving, etc., in Canal St. The itemized bids were given in our issue of Aug. 25. The specifications called for bids for paving the entire street including the neutral ground, on which four or five street railway tracks run for the entire distance. While the bids were being considered an attempt was made by the city authorities to make some arrangement with the railways by which the paving of the neutral ground could be carried on simultaneously with the rearrangement of their tracks. This, however, fell through, and the railways have threatened to take the matter to court. The council then considered the bids for the street and neutral ground separately, and finally decided to reject all bids. The paving of Claiborne and Camp Sts. was awarded to the General Asphalt Co., at $24,687, and to the Ayres Asphalt Paving Co., at $39,174, respectively.

CAMBRIDGE, O.—Bids are asked until Sept. 24 for the purchase of $9,000 of 4½% street bonds. T. R. Deselm, Cy. Clk.

CINCINNATI, O.—Bids are asked until Oct. 5 for grading, granite curbing and granite paving in Delhi Ave. G. H. Spellmire, Clk. Bd. Cy. Affairs.

NORWALK, O.—Bids are asked until Oct. 4 for furnishing the material and constructing a brick pavement, etc., on Norwood Ave. F. W. Christian, Cy. Clk.

ORRVILLE, O.—Herring & Son, Mansfield, O., have been awarded a contract for paving Main St., to cost about $11,000.

SALEM, O.—Davis & Caldwell, Youngstown, O., submitted the lowest bid Sept. 5 for paving North Lundy St., at $4,392.

TOLEDO, O.—Bids are asked until Oct. 10 for paving in Kelsey Ave. with Wassal or Buckeye repressed blocks, etc. L. P. Harris, Cy. Clk.

TOLEDO, O.—Bids are asked until Oct. 3 for furnishing and constructing Wassall block pavement, etc., on 6-in. concrete foundation, on Ontario St. L. P. Harris, Cy. Clk.

ANDERSON, IND.—The council is considering a proposition to pave six streets with asphalt.

BROWNSTOWN, IND.—Bids are asked until Sept. 23 for constructing 12 gravel or macadam roads. John D. Durment, County Audr.

INDIANAPOLIS, IND.—Bids are asked until 10 a. m., Sept. 19, for constructing cement sidewalks, etc., on portions of five streets, and asphalt paving in 11th St. M. A. Downing, Chn. Bd. Pub. Wks.

INDIANAPOLIS, IND.—Bids are asked until Sept. 23 for sidewalks on Pennsylvania St. and Holloway Ave. M. A. Downing, Chn. Bd. Pub. Wks.

NORTH VERNON, IND.—Bids are asked until Sept. 23 for furnishing the material and constructing cement walks on State St., between Walnut and Greenburg Sts., and until Oct. 14 for cement sidewalks on Hicks St. Chas. H. Everett, Cy. Clk.

ROCKVILLE, IND.—Bids are asked until Sept. 30 for grading and graveling about seven miles of road in Adams and Florida townships. E. H. Owen, County Audr.

OWOSSO, MICH.—The Warren-Scharf Asphalt Paving Co. was awarded a contract Sept. 6 by the council for asphalt and brick combination pavement, to cost about $35,000, according to reports.

LEXINGTON, MISS.—The Lexington Compress & Oil Mill Co., of Lexington, informs us that W. O. Glass, Yazoo City, Miss., has been awarded the contract for erecting the new buildings, to cost about $8,000. All the contracts let amount to $30,000; some other small additions may be needed.

MEMPHIS, TENN.—The Memphis Grain Elevator & Mfg. Co., and the Eagle Mills, were destroyed by fire Sept. 8. Total loss, $242,000; insurance, $75,000.

TOLEDO, O.—It is reported that the contract for constructing the Ford glass plant has been awarded to the Shiffler Bridge Co., Pittsburg, to cost $250,000.

DETROIT, MICH.—Plans have been prepared, according to reports, for a new brick factory building, 85 x 240 ft., to be erected on Harper Ave., for Murphy, Wasey & Co., at a cost of about $30,000. Arch., R. E. Raseman.

SOUTH MILWAUKEE, WIS.—It is reported that the United States Glue Co. will establish a new plant at Oak Creek, two miles from this city, and that six buildings will be erected at a cost of about $100,000. Pres., Fred. Vogal, Jr.; Vice-Pres., A. O. Trostel, of Milwaukee.

CONTRACT PRICES.

SEWERAGE SYSTEM.—Clinton, Mass.—The Metropolitan Water Board, Boston, received the following bids Sept. 1 for constructing section 2 of the proposed sewerage system, including the intercepting sewer, reservoir, pumping station, force mains, etc., as advertised in Engineering News; contract awarded Owen Cunningham & Son:

Bids Received at Boston, Mass., Sept. 1, 1898, for Constructing Section 2 of the Sewerage System for Clinton.

Quantities.		O. Cunningham & Son, Somerville, Mass.	Edw. R. Patteson, Hartford, Conn.	M. & T. Murphy, Clinton, Mass.	Jos. D. Gennaro, Boston, Mass.	Messrs. Nawn & Brock, Boston. Mass.	Aab & Co., Waltham, Mass.	McCusker Bros., Waltham, Mass.	Chas. G. Craib, Winthrop, Mass.	Jones & Meehan, Boston, Mass.	C. E. Trumbull & Co., Boston, Mass.	Long & Little, Leominster, Mass.	Moulton & O'Mahoney, Boston, Mass.
Earth excavation for intercepting sewer ..	7,100 cu. yds.	$0.40	$0.48	$0.35	$0.40	$0.40	$0.45	$0.80	$0.80	$1.00	$0.65	$0.60	$0.55
For reservoir and pumping station.....	7,500 " "	.50	.55	.90	1.25	.70	.98	.80	1.00	.80	2.00	2.00	2.25
Borrowed earth	1,500 " "	.25	.22	.20	.25	.30	.33	.35	.50	.50	.30	.40	.35
Rock excavation.	200 " "	3.00	1.75	2.40	2.00	3.00	2.50	6.00	4.00	4.00	4.00	4.00	4.00
Brick masonry, Rosendale cement mortar..	330 " "	11.50	9.50	11.25	13.00	13.00	14.40	14.00	12.50	13.00	12.50	14.00	14.00
Brick masonry, Portland cement mortar..	55 " "	13.00	11.70	12.00	16.00	16.00	16.80	15.50	14.00	13.50	14.00	18.00	18.00
Rosendale cement concrete masonry.....	170 " "	4.50	4.00	4.00	4.20	5.00	4.80	5.50	5.00	5.00	6.00	5.00	6.00
Portland cement concrete masonry	1,390 " "	6.50	7.50	6.00	5.80	8.00	7.20	7.00	8.00	7.00	8.00	7.00	9.00
Stone masonry laid in mortar	130 " "	4.00	6.50	7.50	5.80	8.00	8.00	7.00	4.50	10.00	7.00	6.00	10.00
Stone paving.	20 " "	2.00	2.00	1.85	2.00	4.00	2.16	2.50	4.00	5.00	1.50	4.00	3.00
Furnishing and laying vit. pipe (24-in.)	900 lin. ft.	1.00	.85	.88	.82	1.05	1.00	1.05	1.00	1.25	.87	1.00	.88
Furnishing and laying vit. pipe (20-in.)	3,550 " "	.85	.62	.70	.60	.80	.60	.70	.80	1.10	.67	.90	.65
Furnishing and laying vit. pipe (6-in.)	4,000 " "	.25	.14	.20	.12	.20	.24	.15	.20	.25	.25	.30	.25
Laying 18-in. cast-iron pipe.....	2,220 " "	.60	.72	.60	.61	.50	.60	.35	.50	1.00	.55	.90	.80
Laying 16-in. cast-iron pipe	105 " "	.60	1.00	.50	.50	.50	.60	.30	.50	.90	1.00	.90	.75
Spruce lumber placed in foundations	24 M. ft...	25.00	25.00	30.00	30.00	24.00	22.00	17.00	40.00	30.00	40.00	35.00	30.00
Total		$29,390	$29,861	$30,643	$33,247	$33,759	$35,078	$35,774	$38,958	$40,797	$45,326	$46,001	$49,335

CEDAR RAPIDS, IA.—Bids are asked until 12 m., Sept. 15, for asphalt paving on First Ave., between 10th and 13th Sts. R. N. Buck, Chn.

DULUTH, MINN.—Bids are asked until 10 a. m., Sept. 16, for grading, etc., in 34th and 52d Aves. R. Murchison, Clk. Bd. Pub. Wks.

OMAHA, NEB.—Bids are asked until Sept. 23 for resetting old curb and paving with sheet asphalt, brick or stone on 32d Ave. Andrew Rosewater, Chn. Bd. Pub. Wks.

GRAND FORKS, N. DAK.—Bids are asked until 7 p. m., Sept. 19, for brick or stone paving. F. A. Brown, Cy. Audr.

KANSAS CITY, MO.—Bids are asked until Sept. 20 for furnishing and constructing brick sidewalks on Hickory St. H. A. Wise, Cy. Engr.

DENVER, COLO.—The Denver Paving Co. has submitted the lowest bid, at $71,222, for paving with alcatraz asphalt on Champa St.

PORTLAND, ORE.—The council has awarded contracts to the Trinidad Asphalt Paving Co., at $2,544, for paving in Fifth St., and at $15,542 for paving in Alder St.

ALAMEDA, CAL.—Bids are asked until 11 a. m., Sept. 19, for grading a road. F. C. Jordan, Clk.

NAPA, CAL.—Bids are asked until 7:30 p. m., Sept. 19, for grading First St., from Combs to Monroe St. H. H. Thompson, Cy. Clk.

NIAGARA FALLS, ONT.—Bids are asked until 4 p. m., Sept. 15, for 47,000 sq. ft. of concrete sidewalk, 7,000 sq. ft. of brick sidewalk, 8,000 lin. ft. of stone curb, etc. C. H. Mitchell, Engr.; John Robinson, Town Clk.

MANUFACTURING PLANTS.

MILTON, N. H.—The entire plant of the Waumbeck Woolen Mills was burned Sept. 11, at a reported loss of about $90,000; insurance, $70,000.

ALBANY, N. Y.—The Helderberg Cement Co., 86 State St., which recently put in operation a new plant at Howe's Cave, N. Y., is contemplating the quadrupling of its plant this winter.

CONSHOHOCKEN, PA.—The brewing plant at this place was burned Sept. 8; total estimated loss, $100,000.

PHILADELPHIA, PA.—George C. Dietrich is stated to have been awarded the contract for erecting the ordnance machine shop No. 2 for the Midvale Steel Co., at Nicetown, at $69,000.

LYNCHBURG, VA.—The Lynchburg Cotton Mills Co. expects to double the capacity of its plant.

RICHMOND, VA.—Press reports state that a large shipyard may be established in this city as the result of the award for the construction of several torpedo-boats and destroyers to W. R. Trigg & Co., of Richmond. The government allows three months in which to make preparations.

WARSAW, VA.—L. A. Courtney, whose canning plant was recently burned, is expected to rebuild at once.

McADENSVILLE, N. C.—It is reported that contracts will soon be let for erecting a large cotton spinning plant at this place. Among those interested are, J. H. McAden, Charlotte, N. C.; G. C. Love, Gastonia, N. C., and A. P. R. Lyne, Mount Holly, N. C.

REIDSVILLE, N. C.—The capacity of the Edna Cotton Mills is expected to be doubled.

NEWBERRY, S. C.—E. B. Wilbur and others contemplate erecting a cotton mill at this place.

SPRINGFIELD, S. C.—M. L. Gleaton, of Springfield, is interested in a 5,000-spindle cotton mill which it is proposed to erect here.

SHEFFIELD, ALA.—Press reports state that the Anglo-American Steel Co., of Sheffield, incorporated in Alabama Aug. 31, with a capital stock of $1,000,000, will soon erect a large steel mill in this town.

CONSTRUCTION MATERIALS.—Fort Delaware, Del.—Lieut.-Col. C. W. Raymond, U. S. Engr., Philadelphia, received the following bids Sept. 5, 1898, for furnishing various construction materials, as advertised in Engineering News: American Rosendale cement, 36,000 bbls., Lawrenceville Cement Co., New York, Beach's brand, 68¾ cts. a bbl.; Newark & Rosendale Lime & Cement Co., New York, Newark brand, 77½ cts.; Lawrence Cement Co., New York, Hoffman brand, 68 cts.; American Portland cement, 4,000 bbls., Wm. J. Donaldson, Philadelphia, Alpha brand, $2.35; Walter F. Bradley Co., Philadelphia, Penn brand, $1.91; Commercial Wood & Cement Co., Philadelphia, Lehigh brand, $2.10; Chas. Warner Co., Wilmington, Del., Atlas brand, $2.45 a bbl.; Broken stone, small, 24,000 cu. yds., Standard Lime & Stone Co., Baltimore, Md., $1.12 a cu. yd.; Jno. T. Dyer, Norristown, Pa., 98 cts.; Irvine & Carty, Philadelphia, $1.40; Robt. Patterson & Son, Philadelphia, $1.34¼; Delaware Construction Co., Wilmington, $1.04½; Brandywine Granite Co., Wilmington, Del., $1.20; Broken stone, large, 5,000 tons of 2,240 lbs.; (1) being delivered in scows, and (2) delivered in cars, Standard Lime & Stone Co., (1) $1.12 a ton; Jno. T. Dyer, (2) 73 cts.; Delaware Construction Co., (1) 90 cts., (2) 90 cts.; Brandywine Granite Co., (1) 85 cts., (2) 85 cts.; Sand, washed, 9,000 cu. yds., Robt. Patterson & Son, 37½ cts. a cu. yd.; Chas. Warner & Co., 28 cts.; Sand, unwashed, 18,000 cu. yds., Patterson & Son, 29½ cts. a cu. yd.; Delaware Construction Co., 24 cts.; Warner & Co., 24 cts.; I-beams (1) being for steel I-beams and channels, 163,660 lbs., (2) for bearing plates, 19,668 lbs., and (3) for standard connections, angles and bolts, 1,748 lbs., Phoenix Iron Co., Philadelphia, (1) 1½ cts. a lb.; (2) 1½ cts.; (3) 3 cts. a lb.; A. & P. Roberts Co., Philadelphia, (1) 1 438-1,000 cts.; (2) 1 33-100 cts.; (3) 1 76-100 cts.; Standard Supply & Equipment Co., Philadelphia, (1) 1 4,375-10,000 cts.; (2) 1 3,275-10,000 cts.; (3) 1¾ cts.; totals of bids recommended for acceptance, John T. Dyer, Norristown, Pa., all broken stone, $27,170; Commercial Wood & Cement Co., Philadelphia, American Portland cement, $8,400; Chas. Warner & Co., Wilmington, Del., all sand, $6,840; Standard Supply & Equipment Co., Philadelphia, I-beams, plates, bolts, etc., $2,644; Lawrence Cement Co., New York, American Rosendale cement, $24,480.

SEWAGE FILTER BEDS.—Clinton, Mass.—The following bids were received by the Metropolitan Water Board, dam and aqueduct department, Boston, Sept. 1, for constructing filter beds for the sewerage system in this city, as advertised in Engineering News; contract awarded to Newell & Snowling Construction Co.:

Bids Received at Boston, Mass., Sept. 1, 1898, for Constructing Filter Beds for Sewerage System.

Bidder.	Earth excavation, 64,000 cu.yds.	Masonry.—Brick, 80 cu.yds.	Masonry.—Cncte., 65 cu.yds.	Stone paving, 15 cu.yds.	Vitrified pipe.—24-in., 1,180 lin. ft.	18-in., 3,680 lin. ft.	12-in., 250 lin. ft.	8-in., 1,720 lin. ft.	6-in., 1,440 lin. ft.	Total.
Owen Cunningham & Son, Somerville.....	$0.20	$11.50	$5.00	$2.50	$1.20	$0.60	$0.45	$0.35	$0.20	$18,709
Newell & Snowling Const'n Co., Uxbridge..	.19	15.00	6.00	5.00	1.00	.60	.40	.55	.53	19,022
Lucian A. Taylor, Boston	.184	13.00	8.15	1.50	1.04	.62	.44	.65	.65	19,041
Neill Devine, Clinton	.19	13.50	7.00	1.50	1.10	.80	.60	.40	.37	19,330
Moulton & O'Mahoney, Boston.....	.20	15.00	8.00	3.00	.93	.53	.35	.53	.50	19,332
Long & Little, Leominster.....	.19	15.00	6.00	4.00	1.00	.80	.60	.50	.40	19,520
McCusker Bros., Waltham.	.18	13.00	6.00	2.50	1.30	.80	.36	.70	.59	19,609
Andrew Carberry, East Walpole	.21	13.00	5.00	2.00	1.00	.58	.49	.50	.48	19,823
Jos. D. Gennaro, Boston	.21⅞	13.00	5.00	2.00	.99	.73	.50	.50	.40	20,811
Auguste Saucier, South Framingham.....	.22	14.00	5.50	1.50	1.25	.80	.55	.50	.45	21,645
H. P. Nawn and N. S. Brock, Boston.....	.24	14.50	6.50	3.50	1.10	.70	.55	.73	.70	23,270
Aab & Co., Waltham	.52	12.50	6.60	2.05	1.10	.64	.57	.51	.46	40,075

DREDGING.—Waukegan, Ill.—The council has let the contract to Calkins, Stickney & Holt, Detroit, for dredging in the harbor, at 12 cts. a cu. yd.

BRICK PAVING.—Glens Falls, N. Y.—The Troy Public Works Co., Utica, N. Y., has been awarded the contract, at $1.68 a sq. yd., for paving a portion of Glen St. with bevelled-edged brick made by the Eastern Paving Co., Catskill, N. Y.

DOCK.—Vancouver, B. C.—The New Vancouver Coal Co. proposes to construct a new loading dock, according to reports.

FIRE TRUCK, ETC.—New Rochelle, N. Y.—The trustees will hold an election Oct. 17 to vote on the question of appropriating $5,000 for the purchase of an aerial fire truck and additional hose. The money will be secured by issuing bonds.

FIRE ALARM SYSTEM.—New Orleans, La.—The fire and lighting committee has referred a petition to the assessment committee, recommending that $25,000 be appropriated for a new fire alarm system. Councilman Lafaye may be addressed.

TELEPHONE LINE.—Monroe, Wis.—Reports state that J. F. Sears, Monticello; Erwin Gabriel, Stewart, and Dr. McKeller, Blanchardsville, are about to erect a long-distance telephone line from Monroe to Blanchardville, including all intervening points.

DREDGING, ETC.—Stockton, Cal.—It is reported that steps are being taken by the board of public works to dredge a channel near this city and for the purchase of two self-dumping mud scows with a capacity of 150 cu. yds. Address the superintendent of streets.

LOCK WALLS, ETC.—Kentucky River, Ky.—Thos. C. Sheridan, Buffalo, W. Va., has been awarded a contract, at $188,398, for constructing the masonry lock walls and abutments for the dams of lock No. 8, Kentucky River, as described in our issue of Aug. 4. Capt. J. G. Warren, U. S. Engr., Louisville, Ky.

SEA WALLS, ETC.—Baltimore, Md.—We are informed that the following bids were received Sept. 9 for constructing sea walls and embankments at North and Hawkins Points, Md., advertised in Engineering News Aug. 18 to Sept. 8. Second Lt. Chas. W. Kutz, U. S. Engr., Baltimore:

Geo. F. Nardin, Baltimore (whole work).....	$28,362
Riley & Brubaker, Philadelphia (whole work)....	37,833
T. B. Jones & Co., Baltimore (whole work).....	36,367
R. P. McCormick, Baltimore (whole work).....	24,967
A. Weber and J. C. Smith, Baltimore (whole work).	28,015
W. D. Johnston, Phila.; J. O. Reynolds, N. Y....	36,036
Wm. E. Anderson, Baltimore (Class B).....	8,022
Owen Patterson, Baltimore (whole work).....	36,719
Kirk, Driscoll & Co., Syracuse, N. Y. (whole work).	28,986
Wm. McRoberts, Jr., Baltimore (Class B).....	34,144
Roland W. Finch, Baltimore (Class B).....	8,499
R. P. Fitch, New York (whole work)	39,351
Sanford & Brooks Co., Baltimore (whole work)..	40,243

TELEPHONE SYSTEM.—Kenton, O.—The Home Telephone Co. has let the contract for the construction of the new telephone system to the Central Construction Co., of Wauseon.

TELEPHONE LINE.—Pierre, S. Dak.—Reports state that Nornagle Zeitlow, of the Dakota Central Telephone Co., was in town Aug. 30 to make arrangements to extend the line west from Wolsey.

MISCELLANEOUS CONTRACTS.

BONDS.—Calgary, Alberta, N. W. Ter.—Bids are asked until Oct. 1 for the purchase of $25,000 of 4% bonds. C. McMillan, Cy. Clk., Calgary.

FIRE HOSE.—Saginaw, Mich.—Bids are asked until 4:30 p. m., Sept. 16, for furnishing 1,000 ft. of 2½-in. fire hose. Controller, A. F. Lewis.

BARGE.—Biloxi, Miss.—Bids are asked until Sept. 22 for constructing a barge for the use of dredging. A. C. Smith, Asst. Surgeon, Quarantine Station, Biloxi.

ROTARY NOZZLES.—New York, N. Y.—Bids are asked until Sept. 21 for furnishing three rotary nozzles. Fire Comr., Jno. J. Scannell, 157 E. 67th St., Manhattan.

DREDGING.—Tecumseh, Ont.—Bids are asked until Sept. 17 for dredging in the East Marsh drain. A. J. Halford, Engr., Windsor, Ont.; W. Renaud, Township Clk., Tecumseh.

PIERS, Cleveland, O.—The board of public works has awarded a contract to the L. P. & J. A. Smith Co., Cleveland, at $157,000, for the construction of five piers between Seneca and Erie Sts.

STEAM GENERATORS.—League Island, Pa.—Bids are asked until Sept. 17 for installing steam generators at the League Island navy yard. M. T. Endicott, Ch. Bureau Yards and Docks, Washington, D. C.

DREDGING PLANT.—Mobile, Ala.—Bids are asked until Oct. 13 for the hire of a dredging plant for work at Mobile River and Bay, as stated in our advertising columns. Maj. Wm. T. Rossell, U. S. Engr., Mobile.

COALING STATION.—Pago Pago, Samoa.—Cotton Bros., Oakland, Cal., have submitted the lowest bid, at $133,387, for constructing the steel coaling sheds, wharf, etc., for the U. S. coaling station here. A report states, however, that the contract was let Sept. 13 to Healey, Tibbitts & Co., San Francisco, at $142,900.

DREDGING, ETC.—Wilmington, Del.—Bids are asked until Oct. 10 for dredging and rock removing for a channel 150 ft. wide and 18 ft. deep, in the Christiana River and Delaware Harbor, as stated in our advertising columns; $205,846 has been appropriated for this work. Wm. F. Smith, U. S. Agent, Wilmington.

INDUSTRIAL NOTES.

EXHIBITS AT THE ANNUAL CONVENTION OF THE AMERICAN STREET RAILWAY ASSOCIATION.

JAMES BRYAN & CO., Pittsburg, Pa., exhibited their rail bonds.

VACUUM OIL CO., Rochester, N. Y., had an exhibit of its products.

THE CORNING BRAKE-SHOE CO., New York, showed its brake-shoes.

OHIO BRASS CO., Mansfield, Ohio, had an attractive display of brass goods.

CHAS. SCOTT SPRING CO., exhibited springs for trolley poles, car trucks, etc.

MEAKER MFG. CO., North Chicago, Ill., exhibited several car-fare registers.

STERLING ARC LAMP CO., New York, exhibited several of its enclosed arc lamps.

KOSMIC OIL FILTER CO., Easton, Pa., exhibited three sizes of Kosmic oil filters.

THE WILLIAMS TRUSS RAIL JOINT CO., Boston, Mass., exhibited a full-sized rail joint.

THE AMERICAN RAILWAY SUPPLY CO., New York, displayed a number of car name plates.

THE MONARCH STOVE & MFG. CO., Mansfield, Ohio, exhibited a track cleaner and car stoves.

JOHN T. McROY, New York, was on hand with specimens of the McRoy vitrified clay conduit.

ELMER P. MORRIS, New York, represented manufacturers of various street railway supplies.

HAM SAND-BOX CO., Troy, N. Y., exhibited a sample "Ham" Sand-Box for use upon trolley cars.

THE DUFF MFG. CO., Allegheny, Pa., showed four or five jacks suitable for car and railway work.

SENFORD MILLS, Senford, Me., displayed samples of plush and mohair suitable for car upholstery.

THE WEBER RAILWAY JOINT MFG. CO., New York, had on exhibition specimen Weber rail joints.

NEW YORK SWITCH & CROSSING CO., New York, had in operation a full-sized electric switch point.

PEARSON JACK CO., Boston, Mass., showed several sizes and styles of its well-known car replacing jack.

D. C. SWEET, Springfield, Mass, had a full-sized Sweet's carwheel grinding machine on exhibition.

A. O. NORTON, Boston, Mass., had several Norton jacks suitable for car replacement and general street railway work.

R. BLISS MFG. CO., Pawtucket, R. I., exhibited a platform equipped with two Wood's patent folding platform gates.

CHRISTENSEN ENGINEERING CO., Milwaukee, Wis., had a comprehensive exhibit of the Christensen air-brake system.

THE CHICAGO RHEOSTAT CO., Chicago, Ill., had on exhibition specimens of its automatic motor starting rheostat.

E. F. DE WITT & CO., Lansingburgh, N. Y., had on exhibition a "Common Sense" sand box for street railway use.

ROCHESTER HOSE BRIDGE CO., Rochester, N. Y., had one of its hose bridges assembled on the floor of the main hall.

LYTE STEEL & LEAD WOVEN TREAD CO., Boston, Mass., had samples of a new form of car step tread on exhibition.

DIAMOND STATE IRON CO., Wilmington, Del., had on exhibition models of the "Churchill" rail joint for tee and girder rails.

THE WM. H. GALLISON CO., Boston, Mass., called attention to its steam piping by means of a large Gallison relief valve.

GOLD STREET CAR HEATING CO., New York, had a number of car heaters on hand, of both flat and cylindrical types.

THE COLUMBIA MACHINE WORKS, Brooklyn, N. Y., had a line of trolley wheels, overhead fittings, commutator bars, etc.

THE ADAMS & WESTLAKE CO., Chicago, exhibited car curtains, lights, flexible rail bonds and numerous other supplies.

THE SANITARY ENGINEERING CO., Philadelphia, Pa., had on hand full-sized models of the "Botfield" noiseless manhole cover.

McCARDELL, WEST & CO., Trenton, N. J., exhibited one of its Trenton trolley wagons with revolving platform and extension tower.

BEMIS CAR BOX CO., Springfield, Mass., exhibited a single truck for short cars and a center-bearing double truck for long cars.

NEW YORK CAR WHEEL WORKS, Buffalo, N. Y., exhibited full-sized standard machined car wheels for electric street railway service.

THE PANTASOTE CO., New York, had several street car seats covered with different patterns of "Pantasote," a substitute for leather.

HAMPDEN CORUNDUM WHEEL CO., Brightwood, Mass., displayed a full-sized special grinding machine for truing up car wheels.

BIBBER-WHITE CO., Boston, Mass., exhibited a full line of trolley fittings, also a number of spring snap knife switches, commutators, etc.

ROBINSON RADICAL TRUCK CO. had two small working models to illustrate the action of the three pairs of wheels in rounding curves.

REED MFG. CO., Erie, Pa., Frederick C. McServees, agent, New York, exhibited several different sizes of the Reed standard pipe wrench.

J. H. McGRADY, Boston, Mass., had a model of a car roof on exhibition upon which was mounted a set of Swift's illuminated reversible signs.

THE R. WOODMAN MFG. & SUPPLY CO., Boston, Mass., exhibited an assortment of ticket punches, single and duplex, and speed gages.

AMERICAN VITRIFIED CONDUIT CO., New York, had a working full-sized exhibit of its subway system.

THE ASHTON VALVE CO., Boston, Mass, exhibited a large assortment of its well-known valves and steam gages.

THE TONKIN BOILER CO., New York, had a Tonkin, internally fired, water-tube boiler installed at one end of the exhibition hall.

THE SAFETY THIRD-RAIL ELECTRIC CO., New York, exhibited a model elevated road about 70 ft. in circumference, operated by its system.

THE STERLING SUPPLY & MFG. CO., New York, showed its fare registers, a variety of brass car fittings, car fenders and other supplies.

PENNSYLVANIA CAR WHEEL CO., Pittsburg, Pa., had specimen motor car and trailer wheels. These were 24, 28, 30 and 33 ins. standard wheels.

THE CONSOLIDATED CAR-HEATING CO., Albany, N. Y., had an array of car heaters, switches, regulators, etc., for various kinds of service.

PENNSYLVANIA STEEL CO., Steelton, Pa., had in its exhibit railway frogs, crossings, switchpoints, etc., using "Adamantine" steel for center plates.

METHUEN ELECTRIC CO., Methuen, Mass., exhibited a new form of insulator for screw coupled wire joints, intended to do away with the use of tape.

J. G. BRILL CO., Philadelphia, Pa., had a large exhibit of car trucks, including their "Perfect," "Eureka Maximum Traction" and other standard forms.

McGUIRE MFG. CO., Chicago, Ill., had on exhibition a large single car truck, a motor truck sweeper and snow plow, and several coal-burning car-heaters.

STANDARD UNDERGROUND CABLE CO., Pittsburg, Pa., showed short sections of wires and cables, which clearly indicate the make up of its goods.

DUQUESNE FORGE CO., Pittsburg, Pa., exhibited several spilt steel axle gears, which are built up of forged steel tires and cast-steel spokes and hub.

KEYSTONE ELECTRICAL INSTRUMENT CO., Philadelphia, Pa., had a sham switchboard, upon which was a number of station instruments and switches.

BALTIMORE CAR WHEEL CO., Baltimore, Md., exhibited a No. 10 center-bearing truck for heavy car service and a "Lord Baltimore" single truck for lighter work.

WADSWORTH, HOWLAND & CO., Boston, Mass., exhibited a number of panels coated with its coach colors, and also displayed an assortment of prepared paints.

SAMPSON CORDAGE WORKS, Boston, Mass., exhibited a case containing samples of the "Sampson Spot" braided colored cord for bell ropes and fare registers.

ROCHESTER CAR WHEEL WORKS, Rochester, N. Y., had 12 sample wheels of different sizes and four pairs of standard street railway wheels mounted upon car axles.

WAGNER ELECTRIC CO., St. Louis, Mo., had several switchboard instruments for street railway power stations of the dial dead-beat type, also switches and transformers.

PARTRIDGE MOTOR BRUSH CO., Sandusky, O., was represented by its agent, Elmer P. Morris, New York, who exhibited a case of carbon self-lubricating brushes.

CROSBY STEAM GAGE & VALVE CO., Boston, Mass., exhibited spring seat globe and angle valves, recording gages, steam gages, steam indicators and Branden pump valves.

TAUNTON LOCOMOTIVE MFG. CO., Taunton, Mass., had in the basement three full-sized snow plows, weighing from 8½ to 10 tons, and intended for city or interurban service.

WHEEL TRUING BRAKESHOE CO., Detroit, Mich., had samples of its brakeshoes. These shoes have cast pockets into which is compressed a paste of some abrasive material

THE PECKHAM TRUCK CO., New York, had an exhibit which included eleven car trucks designed for special service. This was one of the largest exhibits at the convention.

AMERICAN MASON SAFETY TREAD CO., Boston, Mass., had samples of its safety tread, which consists of a steel base supporting ribs, between which are held strips of lead.

CHAS. N. WOOD, Agent, Boston, Mass., showed a large variety of electric railway supplies, including a trolley pole catching device to hold the pole down should the wheel run off.

J. D. REED, Boston, Mass., exhibited a number of models of rail joints, track sections and methods of supporting rails included in what is termed the "Perfect" railway systems.

THE INCANDESCENT ELECTRIC LIGHT MANIPULATOR & CLEANER CO., Hyde Park, Mass., showed an extension pole and clamp for replacing or cleaning incandescent light bulbs.

MICA INSULATOR CO., New York, exhibited samples of "micanite" goods, showing how this material is made up for commutators, insulating rings and for other electrical purposes.

THE HIPWOOD-BARRETT CAR & FENDER CO., Boston, Mass., exhibited a very neat model of a new type of car fender provided with a device to follow any unevenness of the street surface.

BORDMAN-TUCKER CO., Boston, Mass., had a number of railway telephones in different parts of the hall and a signal telephone set intended for use along the suburban track on exhibition.

SPRINGFIELD MFG. CO., Bridgeport, Conn., had a working exhibit, which included one of its steam and electric car wheel grinders belted to a motor with a pair of wheels in place ready for truing up.

H. W. JOHNS MFG. CO., New York, displayed its regular line of electric railway and car material, including car heaters and insulators of various kinds for use in motor and line construction, etc.,

JOHN F. OHMER REGISTER CO., Dayton, O., exhibited the top and end of a car with the Ohmer register in place. This register makes a printed classified statement of the various fares collected.

BRADY METAL CO., New York, had a number of sample bearings lined with its special lead alloy. Samples of "Magnus" metal and car brasses made of this material and battery zincs were also shown.

JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J., made a display of its products suitable for railway use, including grease for trolleys, graphite paint, belt dressing and other graphite products.

THE BILLINGS & SPENCER CO., Hartford, Conn., displayed several artistic panels upon which were mounted a large number of drop-forged commutator segments for a variety of motors and generators.

PETTIGELL & ANDREWS CO., Boston, Mass., had on exhibition a 600-ft. roll of 500,000 circular mils Okonite wire and short samples of smaller sizes. A miscellaneous assortment of supplies was also shown.

THE AMERICAN RAIL JOINT & MFG. CO., Cleveland, Ohio, had a number of its rail joints on exhibition.

CAMBRIA IRON CO., Johnstown, Pa., showed short sections of rails cut at joints showing the fish-plates and how the joints were made.

THE COMPOSITE BRAKE SHOE CO., Boston, Mass., exhibited a number of specimen "compo" (cork inserted) brake shoes which had seen hard service and several new shoes showing the original appearance.

BEVERLY MACHINE WORKS, Beverly, Mass., had an exhibit of ratchet street car brakes, ratchet clutch vertical brake wheels for vestibule cars, and an assortment of car trimmings and small brass street railway supplies.

BRIGGS CAR CO., builders of the Duplex convertible car, had on exhibition a fine specimen of car work in an improved cylindrical duplex car which can be changed from a closed to an open car by sliding up the windows and sides.

ALBERT & J. M. ANDERSON, MFG. CO., Boston, Mass., displayed a light steel trolley cross-over, enclosed incandescent arc lamps burning 150 hours, hangers, pull-offs, span insulators and a large variety of trolley parts and brass goods.

BOSTON ARTIFICIAL LEATHER CO., Boston, Mass., exhibited a line of material known as "morocoline," a material used for upholstering chairs, car seats, etc. Several street car seats were covered to show the appearance under working conditions.

HAROLD P. BROWN, New York, had on exhibition specimens of the Edison-Brown plastic rail bond, of various styles. The wearing qualities of this bond in comparison with other types, was shown by bonds which had been in use for some time.

WM. WHARTON, JR., & CO., Philadelphia, Pa., Harrington, Robinson & Co., Agents, Boston, Mass., had on exhibition specimens of special work, such as crossovers, frogs and switchpoints, all provided with manganese steel wearing plates.

PROVIDENCE CAR FENDER CO., Providence, R. I., had three dash-boards representing car fronts placed together upon which were mounted "Providence Fenders." Distributed about were parts of this fender to show the construction and simplicity of this type.

SHERBURNE & CO., Boston, Mass., as Eastern Agents of the Watson-Stillman Co., New York city, showed hydraulic rail benders with vertical and horizontal plungers, hydraulic punches and jacks, and a motor lifting jack intended for use in the car pit of car barns.

TAYLOR ELECTRIC TRUCK CO., Troy, N. Y., exhibited an improved single truck, a single truck with extension truss for long cars, single extra heavy truck with an 8-ft. wheel base and a pair of regular "Empire State" radial trucks of new design with a swinging bolster.

JOHN STEPHENSON CO., LTD., New York, had inside the hall a beautiful 6-ft. model of the Broadway cable car complete in all details. Just outside the exhibition building was a standard full-sized car such as is now in use upon the Metropolitan Madison Ave. line, New York city.

WALKER CO., Cleveland, O., had a section of conduit street railway about 50 ft. long, complete in all details, and upon this was mounted a single truck equipped with two 35 "S" Walker motors. In addition there were two 15 "L" motors for elevated service; a 33 "S" steel railway motor; solenoid "S" controllers, open and in operation to show the solenoid spark blow-out. Other exhibits showed the construction of its motors.

WILLIAM F. ELLIS, Agent, Boston, Mass., displayed samples of the goods, for which he is the New England agent, as follows: Ramapo Iron Works, Hillburn, N. Y., "Diamond S" brake shoe; Dilworth, Porter & Co., Ltd., Pittsburg, Pa., Goldie perfect point spike and claw tie-plate; Continuous Rail Joint Co. of America, Newark, N. J., joints for tees and girder rails; J. H. Sternbergh & Sons, Reading, Pa., Harvey grip and U. S. rolled thread bolts of steel.

THE JOHNSON CO., Lorain, Ohio, had two exhibits, one on the main floor including short sections of rails and cable slot rails, and a model Dupont truck, and a larger one in the basement. The latter included full-sized frogs, cross-overs, switchpoints, crossings, etc., cast together with steel wearing plates. Also a Dupont single truck with steel motors and controller, and a heavy center-bearing truck for elevated or interurban traffic. Mounted upon wooden frames were also two steel motors swung open to show their construction.

GENERAL ELECTRIC CO., Schenectady, N. Y., made no attempt to display heavy machinery, but its exhibit was by all odds the most prominent at the convention. It consisted of an immense globe, 26 ft. in diameter, mounted upon a cylindrical pedestal. The globe was made in 36 sections, fastened together, and covered with nine layers of papier mache. The continents and islands were then painted on, and small incandescent lamps were placed in all countries where General Electric apparatus is in use. The various countries were marked by small silk flags. Around the pedestal on recessed shelves were placed specimen trolley fittings, switches, circuit breakers, lightning arresters, etc. The inside was fitted up to make a very comfortable reception room. To the rear of the globe was arranged a G. E. motor, equipped with a prony brake, controller, resistance, etc., in circuit with a G. E. car watt-meter, an instrument designed to record the power consumed by an electric car in regular operation, and a switchboard with various instruments was also shown.

WESTINGHOUSE ELECTRIC & MFG. CO., Pittsburg, Pa., had an exhibit which undoubtedly attracted as many visitors as any other at the exhibition. This consisted of a large frame supporting three plates of glass 30 × 72 ins., upon the front of which were secured brass letters forming the sentence "The Name Westinghouse is a Guarantee." The backs of these plates were covered with tin foil and a high electro-motive force supplied to the letters and the foil caused sparks to pass from the letters around the plate to the tin foil producing a beautiful and noisy effect. To obtain the high potential, a 25-K-W. rotary transformer with separately excited fields, took current from a 300-volt direct-current generator directly connected to a two-phase alternating current motor, the rotary took current from the Boston Lighting Co. The current from the alternating side of the rotary converter operated either 12 alternating arc lamps at 105 volts, or was switched onto a 15-K-W. auto-transformer capable of raising from 80 to 4,000 volts in steps of 5 volts. It then entered the primary of a 50-K-W. high-tension transformer, which stepped the potential up as high as 60,000 volts. The power consumed varied from 5 to 15 K-W. The exhibit also included three standard street railway motors mounted on frames to show their interior, a 35-HP. armature partially wound to show its construction, and a full line of electric apparatus for cars and stations. In addition a new form of pneumatic switch and current breaker was shown, which was operated by air under a pressure of 80 lbs. per sq. in., obtained from a rotary pump built by the Westinghouse Air Brake Co., which was driven by a 2½-HP. motor.

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